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## ACCIDENTS FROM FIRE.

CÆSAR tells us that the Druids endeavoured to propitiate their cruel deities by roasting human beings in colossal figures formed of osier twigs and hay. Eighteen centuries have flown by since Druidism received its death-blow, but a new idolatry has arisen, and the abominable rite of burning victims alive in combustible cages has been revived. The insatiate demon to which so many of our fair countrywomen have lately been sacrificed is called Fashion. His devotees do not deliberately make burnt-offerings of themselves, but they suspend from their waists light frames of steel, covered with combustible materials which may be ignited at any moment without their knowledge. When one of these portable pyres is set fire to by a match accidentally dropped, or by momentary contact with the burning coals of an unguarded grate, the fate of the unfortunate creature enclosed by it is, in nine cases out of ten, a death of indescribable agony. It is next to impossible to extinguish the mass of flame which instantaneously arises from the flimsy materials spread out upon the open framework, for the fire receives a copious supply of air from the interior of the fatal dome.

Some idea of the dangers of crinoline may be formed from the statement lately made by Dr. Lankester, that out of twenty-three cases of burning to death which have come before him during the short time that has elapsed since his appointment as coroner for Central Middlesex, eighteen have been caused by clothes catching fire.

We are not so Quixotic as to suppose that we, by a few fierce charges with the pen, can destroy the modern Moloch. We must wait until the caprice of the French Empress breaks the spell by which he holds dominion over our wives and daughters, or until the natural modesty and good sense of Englishwomen overcome the cruel enchanter. The reform must be brought about by the ladies themselves. However, while crinoline is worn, it is the duty of every husband, father, and brother, to insist upon precautions being taken to make dresses unflammable, and to keep them at a safe distance from the fires. When a garment is distended so far that the wearer is unconscious of what may be passing at its outer extremity, a new system of personal insurance against fire is necessary. Why ladies should ostensibly wear the airiest of fabrics in winter, while they secretly swathe themselves in warm under-clothing, is to us an inscrutable mystery—but so it is; and if this is a principle too sacred to be questioned, there is nothing for it but to steep the flimsy stuff which they will wear uppermost into some anti-vulcanic preparation.

Those delicate muslins which never come into the hands of the laundress, ought to be made fireproof before they are sold, and those fabrics which are washed ought

either to be "got up" with incombustible starch, or dipped in certain solutions which have the effect of rendering them flame-proof. The best agent for this purpose is *tungstate of soda*; the fabrics being immersed in a solution of one pound of this salt in a gallon of water, or in a still stronger solution, if the article requires to be tightly "wrung" before drying. Dresses, &c., to be starched, may be immersed in a stiffening mixture prepared from starch, to which about one-fourth or one-third its weight of tungstate of soda has been added. A 10 per cent. solution of *sulphate of ammonia* has also been recommended as an anti-inflammable liquid, and it succeeds very well, but articles prepared with it cannot be ironed with facility.\* F. Versmann, of Bury-court, St. Mary-axe, showed tungstate of soda and a starch prepared with it at the International Exhibition. Solutions of *borax*, *chloride of zinc*, *phosphate of soda*, *phosphate of ammonia*, *alum*, and *sal ammoniac* may be employed with more or less success for fire-proofing. The recent cases of severe burning have called forth some useful hints from medical men as to the treatment of burns.

Mr. Frank T. Buckland, in the *Times*, in alluding to a previous letter on the value of opiates, makes the following practical remarks:—

Opiates are excellent things, and should be given for the sake of relieving pain; but the stimulants must not be forgotten. The shock of the burns depresses the whole system most terribly, and laudanum, though it relieves the pain, is also depressing in its effects. I would therefore (as in accidents of this kind time is most precious) recommend the following mixture to be given at once:—Laudanum, 30 drops; sulphuric æther, 40 drops; brandy, a tablespoonful, in a wine-glass full of warm water. This should be given directly, and repeated in an hour's time if the pain is not subdued. This treatment should be followed up by beef-tea and other concentrated forms of nourishment. Of course, the ever-present remedy of covering the burns freely with flour from a flour dredge, and applying cotton wool above the layer of flour, must not be neglected, and should be put in force till the medical man arrives.

A correspondent, signing himself F. C. S., was allowed more than a column in last Monday's *Times* to describe some of the marvellous cures effected by an extremely simple remedy, namely, common *whiting* (washed chalk), the domestic polishing material that is to be found in every kitchen. F. C. S. boldly avers that this simple remedy exceeds all others, and, as he professes to have had thirty years' experience of it, he ought to know. From his amusing letter we are tempted to make a few extracts. Here is a hint to practical chemists:—

Than myself I believe there are few with constitutionally a more susceptible cuticle, and still fewer whose earlier avocations were attended with more of the burns and scalds that are incident to the working members of the profession to which I have the honour to belong. In short, since I have been able to make a crucible red-hot in a kitchen fire, I have had as many mishaps of this character as most chemists; but, thanks to my early acquaintance with the virtues of whiting, I have generally got over them with comparative impunity—mostly, indeed, without a blister, but always without leaving unseemly marks behind. At the same time, much, if not all, depends on the immediateness of the application.

Having made use of his favourite remedy in a doubtful case of scalding, the F. C. S. laughed at by a medical fellow-passenger. To convince the doctor that whiting was really a valuable remedy, he subjected a couple of his own fingers to considerable ill-usage:—

Jokes at the expense of my remedy continued till towards the close of the voyage, when—remembering, no doubt, the story of the wager of old Elves with his surgeon, as to which mode of treatment, his own or the medico's, would make the first cure on two equally bad legs—I proposed to my friend to settle our difference by a somewhat similar experiment, with myself for its subject. As may be inferred, a proposition so reasonable could hardly be refused; so a pair of old curling tongs were procured, and their ends being brought to a dull red heat, were held by a fellow-passenger across two of my fingers, until I gave unequivocal signs of having had enough. The doctor, who confessed the fingers were fairly burnt, as, indeed, they were, was now requested to choose the one he liked the best, and treat it by his own mode. As soon as my friend had made his choice, I had a finger of an old glove, ready filled with a thick mixture of wet whiting, into which I quickly immersed my patient, while the doctor bound his loosely in rags, moistened with linseed-oil, this being his approved remedy. Next day, on removing the covering from my finger, the only discoverable effect of

\* *Pharm. Journal.*

the burn was a hardish brown mark, showing that the skin had been severely acted on, though it was unaccompanied with any sign of inflammation or blistering. The finger chosen by the doctor, on the contrary, was both blistered and inflamed, as I too well inferred from the comparatively sleepless night I had spent. Though this result was no doubt a signal triumph for the whiting, yet, as I remember, it was much tempered by the pain I suffered from my friend's finger—I wished it had been his own—which was not properly healed until several weeks after.

With respect to the method of applying the remedy, he gives the following information :—

It ought to be applied moist, immediately after the accident, and it should be kept so for a few hours. The substance itself requires no renewal, all that is necessary being to keep it moistened with a wet sponge until the pain has subsided, which, unless in very severe cases indeed, is not long. When a limb is much injured, or the body, I have known a bath of it to have a most salutary effect.

The value of chalk as a remedy has since been insisted on by "A Retired F.R.C.S.," who states, in a letter published on Wednesday last, that he had used a paint composed of chalk, linseed oil, and vinegar, in cases of burns and scalds, both in hospital and private practice for forty years. He first saw the paint used by an old woman, and discovered its ingredients by analysis. His form for the paint, and general directions for treatment of burns, may be given in his own words :—

Take chalk and linseed or common olive oil, and mix them in such proportions as will produce a compound as thick as thin honey; then add vinegar so as to reduce it to the thickness of treacle; apply with a soft brush or feather, and renew the application from time to time. Each renewal brings fresh relief, and a most grateful coolness. If the injury is severe, especially if it involve the chest, give ten drops of laudanum to an adult, and repeat it in an hour, and again a third time. To a child of ten years give in like manner only three drops; and beware of giving any to an infant. This plan, with an internal stimulant according to age, as brandy or sal volatile, or both, should be at once adopted, and there need be no impatience for the arrival of the often distant doctor; neither do I advise submission to any change in the plan as regards the chalk paint when he may arrive, for I am quite sure that the College of Surgeons cannot improve it.

## RELATIVE DANGER OF GAS AND MINERAL OILS.

THE panic which seized the mind of the public respecting the dangerous and explosive properties of those valuable sources of artificial light, the mineral oils, is in a fair way of being allayed by the most positive of all evidence—that of experience. Now that persons are becoming more accustomed to the management of these oils, and of the lamps in which they are burned, accidents very rarely occur; and the report of Captain Shaw, the Superintendent of the London Fire Brigade, puts the positive safety of these oils, as compared with that of gas, beyond the possibility of a doubt. During the last year the fires in the metropolis caused by gas amounted to the large number of 124, whereas those caused by naphtha and mineral oils were 2 in number. So that for every fire caused by this so-called dangerous and explosive material, fifty-six were produced by gas. When we recollect the unfounded panic of last year, and the hasty and ill-judged legislation to which it gave rise, we cannot but smile at the small cause which originated so great an effect.

The hydrocarbon oils have had the most violent prejudices to remove, and difficulties to overcome, before they could be said to be firmly established. In the first instance there was the objectionable odour of the badly refined samples which were originally sold, an odour which remained in full force until the Paraffine oil monopoly was assailed by the introduction of oils from other sources. Then came the attempt of the testimonial-mongers of the *Lancet*, and its irresponsible and anonymous self-styled sanitary commission, to make the exact standard of safety that of the oils issued by the Paraffine Company.

After that followed the Petroleum Act, which was one of the most partial pieces of

legislation that it is possible to conceive, regulating only the purely mineral Petroleum—and leaving the Paraffine oil products and the more dangerous turpentine and camphines entirely unaffected. And lastly come the sapient Solons of the City of London, who deny licenses to keep Petroleum products inflaming under  $100^{\circ}$  Fahr.; doing this on the plea of the danger which would ensue to life and property, although every spirit vaults in the City contains a much more inflammable liquid in the form of brandy or other overproof spirits. Still, spite of all these difficulties, the mineral oil trade progresses, and we have no doubt will progress more and more, as still greater improvements are made in the manufacture both of the liquids and the lamps employed in their consumption.

Testing as we do so many samples from time to time, we have been much struck with the rapid improvements made in their manufacture; every month even brings its improvements, and specimens which six months since were regarded as good, would hardly admit of comparison with those now daily coming under our notice.

## GRADUATED MEASURES.

BY BARNARD S. PROCTOR.

It is a difficult thing to get accurately graduated measures; and a difficult thing to measure accurately with them when obtained. This is a subject to which attention has been repeatedly drawn, yet there is room for a few more remarks.

Three and four ounce measures are generally graduated down to drachms and half drachms, but these smaller graduations are rarely trustworthy, even with the better class of measures; those which have the ounces correctly indicated, frequently err to the extent of 25 per cent. in the drachms.

The attraction of the liquid for the side of the measure is a source of inaccuracy in measuring; the variation thus introduced will be least when the measurement is taken from the general surface of the liquid; but measures are generally graduated for reading from the highest edge of the liquid, and if the maker and the user of the measure do not compare notes on this point, dissatisfaction is likely to result. Suppose a measure to have been graduated from this capillary edge of the water used, we may measure *water* in it with all requisite accuracy, but a *fluid ounce* of ether or chloroform will not reach up to the ounce graduation because of their deficiency in capillary attraction; and as the capillary attraction of water stands pre-eminent, all other liquids measured in the same way will be in error, and all in excess of the correct quantity. The extent of this excess will vary from fifty per cent. of the quantity measured, down to a mere nothing; when drachms are measured in a wide glass, the error is, of course, at its greatest. If makers and users of graduated glasses agreed to measure always from the general surface of the liquid, this source of discrepancy would be removed. If makers graduate from the edge, and users measure from the surface, matters are made worse; and if several circumstances conspire, we may find ourselves using one-half more of a remedy than we intend. Thus, supposing we measure from the surface instead of the edge, suppose the graduations indicate a little more than they should, and suppose that we unconsciously held the measure a little out of the vertical, we may measure three drachms each of vin. ipecac., sp. æther nitr., and tr. camph. co., and on putting them into an ounce and a half phial, we find we have only room for one drachm instead of three drachms of acet. scilla, or whatever else may be prescribed to make up the twelve drachms.

It behoves every one who desires a reputation for accuracy to see to his measures and his measuring.

The following table shows the number of *minims* (not drops) of various liquids which were required to measure one fluid drachm in a four ounce measure, in which the drachm graduation was accurately marked, measurement being taken from the capillary edge of the liquid.



Water Co . . . . .	60	Chloroform . . . . .	80
Dilute Acetic Acid . . . . .	60	Ether . . . . .	77
Liq. Acet. Ammon. . . . .	60	Sp. Ammon. Co. . . . .	75
" " Conc. . . . .	65	Sp. Vin. Rect. . . . .	74
Liq. Ammon. '880 . . . . .	70	Sp. Æth. Nitr. . . . .	72
" " '960 . . . . .	67		

The following table will also be interesting for comparison. It gives Frankenheim's results, as quoted in Miller's *Chemical Physics*, and shows the height in decimals of an inch to which various liquids rise in a tube 0·04 inch bore.

Water	sp. gr.	1000	rises	0·604	inch.
Acetic Acid	"	1052	"	0·355	"
Sulph. Acid	"	1840	"	0·331	"
Ess. Lemons	"	838	"	0·285	"
" Turpentine	"	890	"	0·266	"
Spirits	"	927	"	0·242	"
"	"	820	"	0·238	"
Ether	"	737	"	0·203	"
Bisulph. Carbon,,		1290	"	0·201	"

In conclusion, I subjoin a table showing the extent to which we may err in our measurements when several trifling inaccuracies concur, each of which might easily be overlooked. The first column gives the quantity to be measured, the second the inaccuracy in the graduation, the third the error introduced by measuring from the general surface instead of the capillary edge, the fourth the result of the measure being held not quite vertical, and the fifth the quantity intended to be measured as increased by the sum of these errors.

	m	m	m	Total.
f 3j.	5	18	17	3j. 40 m.
f 3j.	30	60	30	3j. 4
f 3ij.	60	60	60	3ij. 3ij.

## NEW REMEDIES.

### FIR WOOL OIL AND FIR WOOL.

THESE preparations have for a long period been held in high estimation in Germany, where they are largely manufactured by Messrs. Schmidt and Co., of Remda, on the Thuringian forest. Some time has elapsed since their first introduction into this country, a brief notice of them having appeared in Professor Bentley's *Manual of Botany*\* more than two years ago; it is, however, only recently that attention has been directed to their valuable properties. They are procured from the finer leaves of the *Pinus Sylvestris*, the Scotch fir, or Cild pine, a well-known tree belonging to the family *Pinaceæ*, or *Coniferae*—The Pine, or Coniferous order, the oil being obtained by distillation, and the wool prepared by some chemical process. The former, which is almost colourless, possesses a pleasant, aromatic, pinic odour, and an aromatic, and to many, not unpleasant taste. Its specific gravity is ·868, it is soluble to some extent in rectified spirit, but more readily so in ether, and burns with a sooty flame, like turpentine. It is stated to prove an unfailing remedy in cases of rheumatic and gouty affections, chalk-stones, paralytic, catarrhal, and spinal affections, chilblains, and burns. In a short notice of this remedy in a recent number, the *Lancet*† says, "As a remedy for rheumatism, it has long been approved of by the leading members of the German faculty, including Dr. Hopp, Professor of Medical Science in Basel; Dr. Paul Niemeyer, in Madeburg; Dr. Henschkel, in Kaltennordheim; Dr. Pauly, in Fost; and Dr. Bajakowsky, in Rosenberg." It is

\* Page 659.

† January 31, 1863, p. 138.

largely prescribed in Germany at the present time, and the increasing demand for it in this country seems to promise its acquisition of a high reputation as a remedial agent.

The wadding is employed for bandaging, and is the best medium for applying the oil; it is said to be repulsive to vermin, and is employed for lining dresses, &c. A knitting yarn is also prepared from the pine leaf, which, in conjunction with other fibrous substances, is woven into articles of clothing, which are stated to render those who wear them free from rheumatic attacks. In cases of rheumatism, gout, neuralgia, and catarrhal affections, as cough, hoarseness, sore throat, and cold in the head, the suffering parts are to be moistened with from fifteen to twenty drops of the oil, and then to be covered tightly with the wadding, so as to exclude the air. A few minutes after the application, a prickling sensation or warmth should be experienced, which is a symptom that the remedy is taking effect. Should this not ensue, the application is to be repeated, and if no irritation be produced within fifteen minutes, moisten the wadding with the oil, when the desired effect will be produced. Should the prickling become painful, remove the wadding and the irritation will abate; in no case must the irritation be allowed to become too painful; and when applied to children, or where the skin is tender, it should be mixed with an equal proportion of olive oil. In cases of chronic rheumatism and gout, its internal administration in doses of from fifteen to twenty drops twice a-day, has been found beneficial. In catarrhal affections, the inhalation of the vapour from ten drops of the oil poured into hot water, and the use of a warm foot-bath containing about thirty drops of the oil, will be found beneficial. Rheumatic pains in the back or limbs, occasioned by cold, are stated to be removed by the use of a warm bath, into which about forty drops of the oil have been put.

Rheumatic toothache may be immediately relieved by rubbing the gum with the oil, and if there be a decayed hollow tooth, by putting a little of the wadding steeped in the oil, into the cavity. Rheumatic face ache, by moistening first the gums and then the cheek, with a few drops of the oil, and covering it with the wadding; and rheumatic earache, by putting a few drops of the oil mixed with almond or olive oil upon a piece of the wadding, and introducing it into the ear. After a cure has been effected, it is recommended to continue the application of the remedy twice or thrice a-week, to prevent a return of the complaint.

### GERANIUM MACULATUM.

SYNONYMS.—Alum Root, Crow-foot, Spotted Crane's-bill, Spotted Geranium.

This is a handsome plant, of which there are several varieties, varying in the form of their foliage and the colour of their flowers. It is indigenous throughout all the States of North America, where it grows in hedges and thickets, and on the borders of damp woods, generally in low grounds. As its generic name implies, it is a member of the natural order *Geraniaceae*. The Crane's-bill order—a family of plants chiefly remarkable for the beauty of their flowers, and for astringent and aromatic qualities. Seven species of the genus *Geranium* are indigenous to North America, of which the species *Maculatum* and *Robertianum* are most employed.

BOTANY.—The root is perennial, fleshy, horizontal, and furnished with short fibres, of a brownish colour, mottled with green externally, and greenish white internally. It should be collected in the autumn. The stem is annual, herbaceous, erect, round, furnished with reflexed hairs, becoming forked at a height of from six to ten inches from the ground, and attaining a height of from one to two feet. The leaves are hairy, of a pale green colour, mottled with still paler spots, and deeply divided into from three to seven lobes, which are variously incised at their extremities. The radical ones, or those rising immediately from the root, are supported on footstalks from eight to ten inches in length. The stem leaves are opposite, the lower ones being petiolate, and the upper ones nearly sessile, with lanceolate or linear stipules. The flower stalks spring from the forks of the stem, and the flowers are arranged in pairs upon two short pedicles, each bearing its flower. The flowering takes place from about April to June or July, and the

blossoms are usually of a lilac colour, but vary according to soil and situation. The fruit is capsular, and contains five seeds. When ripe it curls up in a curious manner and scatters the seeds.

**CHEMISTRY.**—The root is almost inodorous, and has an astringent taste, with scarcely any bitterness or any other unpleasant flavour. It contains, according to Dr. Staples, a large quantity of gallic acid, tannin, a little mucilage, a red colouring matter which is stated to reside principally in the external covering of the root, resin in small quantity, and a crystallizable vegetable substance. A principle termed *Geraniin*, one of the so-called concentrated preparations, so largely employed now in America, is extracted from it, and is said to consist of an oleo-resin and extractive matter, together with tannic and gallic acids, and all other principles capable of being extracted with hydro-alcohol. It is described as a reddish brown powder, having a pleasant aromatic odour and a slightly acrid and astringent taste with scarcely any bitterness. It is slightly soluble in water. The tannin and gallic acid existing in this plant are stated to differ from that of oak galls in not reddening vegetable blues, and not passing over in distillation. The virtues of the plant are communicated to water and alcohol, and the fluid extract which is a hydro-alcoholic solution, is said to contain all the virtues of the plant, and to be the most efficient preparation.

**MEDICINAL PROPERTIES.**—This plant has long been regarded by the American Indians as a remedy in venereal affections, and its root, which is officinal, is a powerful astringent, and is said to contain more tannin than kino. In America it has been used as a remedy for many years in chronic diarrhœa, cholera infantum, chronic dysentery, hæmorrhages, &c., but care should be taken before it is administered, that the condition of the system and of the part affected is not such as to contra-indicate the use of astringents. According to Dr. Bigelow, "it is particularly suited to the treatment of such diseases as continue from debility after the removal of their exciting cause." The tincture forms an excellent application in sore throat and ulcerations of the mouth. The absence of unpleasant taste and all other offensive qualities renders it particularly serviceable in the case of infants or persons with very delicate stomachs. The principle *Geraniin* is stated to prove a superior agent in the first and second stages of dysentery, diarrhœa, and cholera morbus. It also forms an excellent application to bleeding wounds and in epistaxis.

**PREPARATIONS AND DOSES.**—Messrs. Tilden and Co. give the following in their book of Formulæ:—Fluid Extract, dose, ʒss. to ʒj; Solid Extract, grs. iij to grs. xv; *Ceraniin*, gr. j. to grs. v.

The powdered root is used in doses of from grs. xx. to grs. xxx. It is also administered in the form of decoction, made by boiling ʒj. of the root in Oiss. of water down to Oj. Dose f. ʒj. to f. ʒij. A decoction in milk is sometimes given to children.

## THE NEW OILS.\*

### APYRORECTIC OIL.

FREDERIC TALL, LIME-STREET, GROVES, HULL.

This oil is in some respects the most remarkable that has come under our notice. In appearance, it presents a very slightly coloured fluid, perfectly limpid, and, consequently, capable of rising through a long wick with rapidity. Its odour is slight, but not as unpleasant as that of some other oils; however, from the low volatility of the oil, its smell is less perceivable during combustion than that of many other samples. The remarkable peculiarity about the sample forwarded is, that in spite of its limpidity, the point at which its vapour takes fire is 180° Fahrenheit; consequently, its inflaming point is 80° above the requirements of the Petroleum Act. Hence it well deserves the name of "apyrorectic, or non-explosive oil." We have tested its illuminating power in various lamps: it burns freely, and gives a good light, free from smoke or smell.

\* From the *Oil Trade Review*, a monthly supplement to *The Grocer*.

## SAXOLINE OIL.

JAMES LAWRIE AND CO., 63, OLD BROAD-STREET, E.C.

The so-called Saxoline oil of Lawrie and Co. is one of the best oils in the market. It is perfectly colourless, and as nearly free from smell as any hydrocarbon can be. It burns with a very brilliant pure white light. It is exceedingly limpid, although its inflaming point is not under 125° Fahrenheit. It is almost needless to state, that an oil of this character is perfectly safe, and adapted to every variety of hydrocarbon lamp.

## CAMBRIAN CRYSTAL OIL.

J. ROBERTSON SWAN, 4, SKINNER'S-PLACE, SIZE-LANE, E.C.

In our notice of this oil in our last month's issue, we stated that its inflaming point was 112° Fahr., but that in all other respects it was a very good article. It appears that a wrong sample was accidentally forwarded to us, and that it does not represent fairly the quality of the oil as issued by the firm. Another sample has been sent, and we have been requested to report upon it, as it represents the oil as at present sold.

The oil under examination is nearly colourless—with a very slight odour, it may be described as a very pure limpid liquid. The temperature at which it inflames is not under 122° Fahr. Its illuminating power is very good, the flame being white and brilliant.

## CAMBRIAN OIL.

J. ROBERTSON SWAN, 4, SKINNER'S-PLACE, SIZE-LANE, E.C.

This is a very superior low-priced shale oil of a pale yellow colour, very bright, clear, and limpid. The odour possesses the peculiar characters of a shale product, but is exceedingly slight and not penetrating. The oil is remarkable for its very high inflaming point, not taking fire until heated to considerably over 140° Fahr.

The illuminating power is very good, it burns free from smoke or smell, and may be described as one of the best and safest economical oils that have come under our notice.

## CRYSTAL CARBON OIL.

MESSRS. GILBERT AND GIBSON, 14A, CANNON-STREET, E.C.

The oil forwarded under this title is a perfectly colourless fluid, as transparent and more limpid than water, it possesses the slightest possible odour, which is of a very pure and agreeable character. Its illuminating power is very good, it burns with a brilliant white light, and rises freely. Its inflaming point is 112° Fahr.

## MINERAL TURPENTINE.

MESSRS. GILBERT AND GIBSON, 14A, CANNON-STREET, E.C.

Messrs. Gilbert and Gibson have also forwarded to us samples of a very superior mineral turps, perfectly colourless, without any nauseous odour, and so pure, that a portion spilt on the whitest paper evaporates without leaving the slightest stain or trace of odour. This is one of the best specimens of mineral turps that has been sent to us for examination. It is hardly necessary to say that it comes under the operation of the Petroleum Act, and that more than forty gallons may not be kept in an unlicensed place, as, like the ordinary vegetable turpentine, its vapour takes fire at the ordinary temperature of the air.

## PURE BREAD.\*

In these camel-swallowing times, if a waiter at an eating-room were to hand a customer a piece of bread with his bare fingers, the chances are that, if the diner were an irascible man, the unfortunate wight would soon find himself in the street. If a guest at your dinner-table were to commit the same heinous offence, no doubt you would consider the

\* Extracted from the *Chemical News*, January 31.



crime against good breeding and cleanliness so great that it would be his last appearance at your board. And yet the hands of the two culprits were undoubtedly scrupulously clean. The bread they had touched, however, and about which we feel no disgust when handed with a fork, was prepared in a loathsome, underground den, reeking with filth and vermin; the hands with which the dough was mixed were dirty; and the exertions of handling heavy masses of leavened flour in a close, unventilated bakehouse caused the perspiration to roll off the arms and face of the workmen in streams into the trough. The board on which the dough was laid preparatory to its being fashioned into loaves, had served, but a few moments before, with a filthy sack thrown over it, as the temporary couch of a journeyman baker, to whom personal ablution was a stranger. To fill up this picture of horrors, there is one bakehouse at the West-end in which the space between the kneading-trough and the wall was used for the same purpose as those cast-iron erections which are now beginning to form inseparable adjuncts to our cab-ranks. Our readers, we are sure, are in possession of the strongest stomachs that long courses of sulphuretted hydrogen, kakodyl, selenethyl, and other odoriferous compounds, can bestow on the human subject; but we think we have said enough to raise a slight disgust to ordinary shop bread. If we have not said sufficient, let them read a copy of Mr. Tremeneere's report on the condition of the journeymen bakers of the metropolis, and they will find horrors piled on horrors to such a height, that they will never eat shop bread again. Several readers of that fatal report have abjured the baker, and now subsist entirely on home-made bread, kneaded and shaped into loaves by the fair hands of some female member of their family, instead of by the filthy paws of a journeyman baker.

But it is not every one who possesses in his family a good bread-maker, for bread-making is a talent, and cannot be acquired without long apprenticeship. Hence, the differing qualities of home-made bread. The poor bachelor, too, who is obliged to gulp down the unsavory penny-loaves from round the corner—our pity is great for him. We were much pleased, therefore, to receive an invitation from Stevens' Bread Machinery Company, to inspect their bakehouses, lately established at Islington and Brompton. It does one's heart and stomach good to see the cleanliness with which all the operations are carried on, from the flour to the finished loaf. The establishment at Islington consists of a spacious shop, at the back of which is the machinery with which the bread is kneaded, worked by steam. This we will not describe, as Stevens' Bread-Making Machine has already been before the public for some years. Suffice it to say, that the laborious operation of kneading is accomplished by a series of claws, revolving in the trough in which the mixture of yeast, flour, and water, is contained. This portion of the building is divided from the shop by a glass partition, so that the public may see for themselves the cleanliness with which all the processes are conducted. Behind the machinery are two tiers of ovens, approached by light, iron stair-cases, and, above all, is the flour store. The bakery at Brompton is conducted on a precisely similar plan, and the inhabitants of these favoured localities are enabled to procure a constant supply of pure bread. Although we do not generally approve of joint-stock companies entering into trade, we must confess that, in this instance, an inestimable advantage will be conferred on the public at large by the establishment of a few large concerns of this sort in different parts of London. The private baker who persists in employing the dirty hand-and-arm-kneading process will soon find his customers forsaking him, and will seek a remedy in employing one of the company's machines. Of course the prejudice in the trade will have to be broken down, and this will take time. In the meantime, such of our readers as do not inhabit the localities we have named, will do well to inspect the company's family dough-making machines and fireclay ovens, which will bake bread in front of a good kitchen fire. There is one part of the company's method of bread-making that we must, in parting, take exception to, and we do so without hesitation, inasmuch as the remedy can be found by the exercise of a little of the ingenuity which has been brought to bear on the other portions of their machinery. A theoretically pure loaf ought not to be touched by human fingers until it reaches the home of the

consumer. In the company's works, as soon as the dough leaves the fermenting trough, it is fashioned into loaves by the assistants. The public are so accustomed to the shape of the ordinary household loaf, that no other would be acceptable. Square bricks serve very well for sandwiches, and "cottages" for people possessed with perfect teeth, but will not do for general purposes. In these days, when tiles and drain-pipes of the most complicated forms are made by machinery, we can see no reason why the ordinary household loaf should not be made by mechanical means.

In conclusion, let us advise the company most strongly to have nothing to do with testimonials from the numerous adulteration-mongers, from whom, we have no doubt, they have long since received applications to analyse their bread. If their bread is good—and the samples we have tasted were excellent—the public will soon find it out, and bestow on them the best of testimonials—a large trade; while fulsome letters from half-a-dozen "chemical and microscopical analysts," with half the alphabet added to their names, can only bring suspicion on their wares, and make sensible people chary of dealing with them. If "good wine needs no bush," what shall we say of that still greater rarity—good bread? The company has commenced in a spirited and dignified manner, without puff or flaming advertisements. Let them go on so, and we venture to prophesy that their household loaves will soon become "household words."



#### DR. LETHBY'S NEW TEST FOR ARSENIC.

Our old friend Dr. Letheby, who acquired a considerable reputation some few years since as a very successful lecturer on chemical magic, occasionally ventures on the dangerous ground of analytical chemistry. The frequent employment of arsenic in the form of arsenite of copper as a green pigment renders it desirable that some readily-applied test should be generally known by means of which its presence may be easily determined. For this purpose Dr. Letheby proposes liquor ammoniæ, the fact being that ammonia is a test, not for arsenic, *but for copper*; consequently the several green pigments which contain the latter element without the former, would nevertheless give the characteristic dark blue colour which Dr. Letheby assures us is a test for arsenic in paper-hangings and artificial flowers.

Some short time after the promulgation of this statement, Mr. Horsley, F.C.S., wrote to the *Times* to correct Dr. Letheby's absurd blunder. He proposes to add to the dark blue ammoniacal liquid, a fragment of nitrate of silver, on the surface of which he states yellow arsenite of silver will appear, if arsenic be present. This mistake is quite as inexcusable as the other. Arsenite of silver is excessively soluble in ammonia, and as it is necessary to have excess of ammonia present in these experiments, in order to develop the deep blue colour of the copper compound, it is difficult to see how the yellow arsenite of silver can be separated in a visible form.—T.

#### FLEXIBLE SULPHUR.

A very curious chemical discovery has been made by Dissenbacher, a young German chemist. By the addition of a small quantity of chlorine or iodine, pure sulphur is rendered perfectly soft; and the Paris Academy, to whom the experiment was exhibited by H. Deville, were astonished to see a thin leaf of sulphur thus treated as flexible as if

made of wax. This unanticipated fact allows us to understand the effects of the sulphuration of caoutchouc.\*

#### POISONING BY VERATRUM VIRIDE.

In the *Medical Times and Gazette*, a case of poisoning by green hellebore is reported by Dr. G. N. Edwards, who was summoned to see a gentleman, a scientific chemist, who had taken, experimentally, one drachm of the tincture of *Veratrum viride* (equal to about 12 grains of the powder). The symptoms were—vomiting; skin cold, and covered with a profuse clammy sweat; his pulse quite imperceptible. An ounce and a half of pure brandy was administered, which checked the vomiting. A dose, consisting of Sp. Ether. Sulph. Co. ʒss., and Sp. Ammon. Arom. ʒj., was given, but immediately rejected by the stomach; but some brandy given directly afterwards was retained. A large mustard poultice was applied to the epigastrium, and a hot-water bottle to the feet. Warmth gradually returned to the surface, and the patient fell asleep for about a quarter of an hour, and awoke comparatively well. The above is the first authenticated case of poisoning by green hellebore.†

#### COD-LIVER OIL WITH CITRATE OF IRON.

Mr. William Southall, Jun., of Birmingham, has made the following communication to the *Pharmaceutical Journal* :—

“Having an order recently for cod-liver oil with ammonio-citrate of iron, we tried two or three plans for making it, without succeeding in dissolving the citrate; and we therefore ordered the article from a well-known London pharmacist. When it came, we found that his success was no greater than our own; and in reply to our communication, he sent us a bottle from another well-known house. This was darker in colour, having apparently been made some time; but finding the indication of iron to be very slight, we sent a small sample to a friend of ours, a chemist known in the scientific world, and he assured us, that to estimate the salt of iron at a quarter of a grain in each ounce would be above the mark.

“This being the case, I would call attention to the value, or rather want of value, of such a preparation. Certain substances, as quina and iodide of iron, are known to be soluble in cod-liver oil; whilst others of a different character, as the salt in question, are now introduced as available for the purpose; but unless it can be proved that such medicated oils can be prepared of a reasonable strength, they only become a source of annoyance to the chemist, and of deception to the patient.”

#### ARTIFICIAL FORMATION OF BENZOIC ACID FROM ANILINE.

At the Royal Institution, Dr. Hoffman lately described a remarkable series of experiments illustrating the artificial formation of benzoic acid from aniline. It is found that when aniline,  $C_{12}H_7N$ , is passed through a red hot tube it yields a certain proportion of benzo-nitrile, the formula of which is  $C_{14}H_5N$ ; and further, that when this is boiled with potash, benzoic acid is formed, which unites with the potash, forming benzoate of that alkali. The changes that take place in these reactions are remarkable, as being the converse of those that usually occur in parallel decompositions, where the substances pass from a higher and more complex to a simpler form. Here, on the contrary, we pass from a lower to a higher state, and from a substance containing twelve equivalents of carbon to another which consists of fourteen.

#### THE IMMUNITY OF THE STOMACH FROM BEING DIGESTED.

A paper on this subject was lately read before the Royal Society by Dr. Pavy. It is thus noticed in the *Intellectual Observer* :—“The fact that the stomach resists during life the action of its own gastric fluid, but that it is readily dissolved by it after death, should that event occur during the process of digestion, is one well known to physiologists.

“John Hunter attributed this immunity to the protecting agency of the living principle;

\* *The Reader.*

† *Pharm. Journal.*

but it has been shown, by direct experiment, that the tissues of living animals are dissolved when introduced into the stomach. At present the prevailing idea is that the mucous lining serves as a protection, by being constantly renewed during life."

Dr. Pavy's paper contained a description of some experiments disproving this view, inasmuch as he found that the mucous membrane might be entirely removed from a portion of the stomach, and that food could afterwards be digested without the abraded surface of the stomach presenting the least evidence of having been attacked.

Dr. Pavy suggested that the protection of the stomach was due to chemical principles; inasmuch as the acidity, which is an essential characteristic of the gastric juice, would be prevented acting on the living tissues by the current of alkaline blood which is always circulating during life; but that after death, the blood being stagnant, there would be no resistance to the penetration of the acid digestive menstruum, consequently the stomach itself would be attacked if death occurred during the continuance of the digestive process. In the discussion which ensued, Dr. Miller observed that as the blood contained in the vessels of the stomach had secreted or discharged the acid digestive fluid, it must be in a much more alkaline condition than the general mass of the blood, a circumstance which would tend to support Dr. Pavy's theory.



*Handbook of the British Flora.* Illustrated Edition. By GEORGE BENTHAM, F.R.S., President of the Linnæan Society. In Monthly Parts. Lovell Reeve and Co.

THE botanical student who cannot afford to take in the splendid work of Smith and Sowerby, noticed in our January number, ought to feel particularly grateful to Messrs. Lovell Reeve and Co. for having undertaken the publication of an Illustrated Edition of Bentham's admirable *Handbook of the British Flora*. For Sowerby's bold life-size



BLACK MUSTARD.



OPIUM POPPY.

coloured figures of British plants, the carefully executed wood-engravings now added to Bentham's work are good substitutes. These engravings are from original drawings by the skilful hand of W. Fitch. Their size and general character are indicated by the specimens which we reproduce; but we may remind our readers that the impressions





upon these pages are taken hurriedly from casts, and therefore do not exhibit the wonderful delicacy of the finely-printed illustrations to the *Handbook*. Every species will be represented pictorially by a figure of the plant, and drawings of the magnified dissections and principal organs. The first part of the work appeared on the 1st of January. Twenty-five monthly parts, at 2s. 6d. each, will complete the work, which is meant to form two handsome volumes of about 1,000 pages, with nearly 1,300 engravings. The Introduction will be re-written, and adapted to the present advanced state of science, and the Analytical Key, an important feature of the work, from the valuable aid it affords the collector in determining and naming his specimens, will be rendered as perfect as possible by the adoption of such improvements as experience and study have suggested. The value of such a work, both to the botanical student and the amateur, and the assistance it will afford them in the prosecution of their studies and researches, will be obvious to all; while the



COMMON ACONITE.

very moderate price at which it will be issued will bring it within the reach of those who are debarred from more costly works.

An extract from the Preface, printed in Messrs. Reeve and Co.'s prospectus, will give the reader an idea of the nature of Bentham's *Flora* :—

The author's object has been to supply a deficiency which he believes has been much felt. He has been frequently applied to to recommend a work which should enable persons having no previous knowledge of Botany to name the wild flowers they might gather in their country rambles. He has always been much embarrassed how to answer this inquiry. The book he had himself used under similar circumstances in a foreign country, the *Flore Française* of De Candolle, is inapplicable to Britain. Our own standard Floras, whatever their botanical merit, require too much previous scientific knowledge for a beginner or mere amateur to understand without assistance the characters by which the plants are distinguished from each other. In the endeavour to compile a more practical guide to the botanical riches of our Islands, the author has recalled to his mind the process by which he was enabled, near forty years since, without any previous acquaintance with the subject, to determine the wild plants he gathered in the neighbourhood of Angoulême and of Montauban, the difficulties he had to surmount, and the numerous mistakes he was led into. Keeping these points in view, and taking, in some measure, De Candolle's *Flora* as his model, he has here attempted a descriptive enumeration of all the plants wild in the British Isles, distinguished by such characters as may be readily perceived by the unlearned eye, and expressed, as far as lay in his power, in ordinary language, using such technical terms only as appeared indispensable for accuracy, and whose adopted meaning could be explained in the work itself.

Supposing, however, that descriptions are so successfully drawn up that the young botanist may readily identify them with the corresponding plants, they alone are insufficient; he cannot be expected to read them all through till he comes to the one which he is in search of. Some method of arrangement must be adopted. They must be so classed as to enable him to refer, by as simple a process as possible, to the identical description belonging to his plant. If he knows the name, and wishes to ascertain what kind of a plant it designates, an Alphabetical Index is at once suggested. For the converse problem, where the plant is given and its name is sought for some corresponding device must be resorted to, and the more simple it is the better it will answer its purpose.

The method adopted is that originally proposed by Lamarck, and applied to the whole of the French Flora. The general principle of this system consists in the searching for some striking character which will at once separate all the plants belonging to the Flora into two groups, then, taking each group in succession, dividing it again into two smaller ones in the same way, and so on until the species become isolated. In this process certainty and rapidity are the two great objects; and the most important rules to follow are, first, the selection, at each operation, of characters so absolute as to afford the least room for hesitation as to which of the two divisions the plant in question belongs to; and, secondly, the formation of subdivisions as nearly equal in point of number of species as possible.

#### *The Papermakers' Monthly Journal.*

ANOTHER member of the useful family of Trade Journals! The CHEMIST AND DRUGGIST sees much to admire in his little brother. He has an honest look, and seems to understand his business thoroughly. He represents a small but wealthy and influential class,

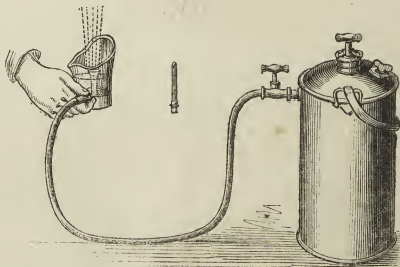
and his soul is wrapped up in paper. He does not seem to relish Mr. Gladstone's financial dishes, being of opinion that Free Trade ought to be *done to rags*. He likens the foreign papermakers to ticket-of-leave men, and their English rivals to a noble army of martyrs. His views are necessarily somewhat narrow, because they are those of a minority. However, with the opinions of the papermakers the CHEMIST AND DRUGGIST has nothing to do, but has merely to note the advent of a healthy-looking brother, who can and will give forcible expression to those opinions.



### SAVORY AND MOORE'S NEW DOUCHE.

THE employment of a douche bath in many diseases of the rectum, such as piles and prolapsus, is exceedingly advantageous, but has been limited by the inconvenience of its application.

This difficulty is, however, entirely obviated by the new instrument which has been issued by Messrs. Savory and Moore, and which is figured in the annexed engraving. The apparatus consists of a cylinder, in the centre of which is an air pump; on one side of the top is an opening capable of being closed by a screw. This serves for the introduction of the liquid to be used; on the opposite side is a stopcock, connected with which



is a flexible tube, terminating in the middle of an India-rubber cup, open below; this cup, by its elasticity, readily adapts itself to the perineal region, and prevents the inconvenient splashing of the liquid employed.

The instrument is used by first pouring in the requisite quantity of the liquid, which amount, by a ingenious mechanical contrivance, cannot be exceeded; the screw is then fitted on, and the piston of the air-pump worked until a sufficient force of compressed air is generated, when the patient can, without requiring the presence of an assistant, direct the jet as required; and by regulating the opening of the stopcock, the force of the expelled fluid can be graduated to the exact extent requisite in each particular case.

The apparatus is equally applicable to cases of uterine disease, and promises to supply what has hitherto been a very great desideratum in the treatment of these complaints—namely, an instrument capable of being employed without the aid of a second person.

### SAVORY AND MOORE'S EFFERVESCENT SALTS OF MINERAL WATERS.

THE use of the various mineral waters of this country and the continent, would be much more general if it were not for the difficulty of preserving them unimpaired for any length of time, and from the inconvenience and expense attending their transport in a liquid form.

To obviate as far as may be these inconveniences, Messrs. Savory and Moore have issued a series of preparations in the strictest accordance with the best analysis. Each of these contains, in a solid portable form, the whole of the ingredients of the mineral water represented, and when dissolved, the natural amount of effervescence ensues.

The great advantage of these preparations is obvious. They furnish in a permanent form, which is at the same time quite portable, medicinal agents that have hitherto only been available in few situations.

Thus the powerful deobstruent action of the Carlsbad waters, the energetic aperient influences of the springs at Pullna, the beneficial alkaline effects of the waters of Vichy, as well as the antiarthritic powers of the Cheltenham springs—so valuable not merely in gouty cases, but in functional derangement of the liver—are all made available to residents not only in England, but in any part of the world.

### COMPRESSED RED PRECIPITATE.

We have had forwarded to us from a subscriber at Taunton a specimen of red precipitate condensed into a solid form, so as to admit of being employed in the same manner as a pencil of lunar caustic.

The use of red precipitate as an escharotic has been frequently found inconvenient, owing to its having to be employed in the form of powder, which cannot be applied exactly where required. This source of annoyance is completely obviated by the formation of the remedy into a solid stick, which we should think would be found very useful in all cases where the employment of red precipitate is indicated.



### LAW AND CRIME.

#### SILLEN v. HOLLOWAY—OINTMENT OR POMADE?

This was an action tried before the Lord Chief Justice in Middlesex, when a verdict was found nominally for the plaintiff, with leave to move to maintain his verdict for £500 or for £150. A report of the case was given in our December number. In the Court of Common Pleas, on the 12th ult., Mr. Bovill, Q.C., with whom was Mr. C. Pollock, moved, on behalf of the defendant, to set aside the verdict, or for a nonsuit. The action was brought by the plaintiff, a foreign physician, to recover £500 for his services in procuring permission to sell Holloway's ointment in France and her colonies. The contract on which the plaintiff sued was contained in a letter from the defendant to the plaintiff, in which he promised to pay the plaintiff £1,000 if he obtained permission to sell his ointment and pills in France and her colonies, with liberty to advertise the same, or £500 for the like permission as to the ointment. In January, 1861, the plaintiff obtained a brevet or patent authorizing the defendant to sell his ointment. But that was of no use or value. By the law of France, no secret remedy was to be sold or advertised without the sanction of the Minister of the Interior or a decree of the Emperor; and if a patent were obtained for a secret remedy, it was simply void. The plaintiff had described the ointment as a pomade, and had sent for a box of it to be analyzed in France, and there it had been found to consist of white wax, yellow wax, hog's lard, and turpentine—and liberty to sell this pomade had been obtained; but the defendant contended his ointment was a secret, and that he would not divulge its constituents on any consideration. The patent had not been renewed, and on that account it was also void. On these grounds he contended that the plaintiff was not entitled to his verdict, nor to the sum of £150 as remuneration for his services.—Rule *nisi* granted.

On the 27th ult., this curious case reached another stage.—Mr. Brandt, on behalf of the plaintiff, showed cause against the rule obtained by the defendant's counsel. He stated that the action was brought by Dr. Sillen, a Swedish physician, against Mr. Holloway, who called himself Professor Holloway, the proprietor of Holloway's ointment and Holloway's pills, to recover £500, on an agreement entered into by the plaintiff with the defendant, that if the plaintiff could obtain permission, through some influence he had, for the sale of Holloway's ointment in France and her colonies, he was to have £500. Dr. Sillen went to France, saw Dr. Lamball, the physician of the Empress, but

found he could do nothing without some specimen of the ointment and pills; and in answer to his application the defendant sent the plaintiff over two pots of his ointment and one box of pills, recommending the plaintiff to concentrate all his efforts to procure permission to sell the ointment, which the defendant represented to be wonderfully efficacious for the cure of old wounds, on which it should be rubbed "like salt on meat." The defendant's letter went on to state, "The pills is (*sic*) a great purifier of the blood."

Mr. Bovill.—The pills are—

Mr. Brandt.—No; it is "the pills is" in the original letter. On the receipt of the ointment, the law of France prohibiting the sale of secret remedies, it was submitted to the authorized French chemists to be analyzed, and it was found to contain butter, lard, Bordeaux turpentine, white wax, yellow wax, and nothing else. On finding these to be the constituents of the ointment, the fear of the French against secret remedies fled at once, and Dr. Sillen obtained a brevet or patent for the sale of the ointment. But it was objected that the patent was for pomade and not for ointment, the brevet being granted for "*Pommade dit Holloway*." If this was not Holloway's ointment, the learned counsel did not know what it was. But Mr. Holloway said the patent was not what he wanted—he wanted a decree of the Emperor for the sale of his ointment, which he would not be very likely to get, or he would not pay Dr. Sillen. It was objected that a patent for the sale of pomade was not a patent for the sale of the ointment—that "*pommade*" meant pomatum, and that the patent ought to be for the sale of "*onguent*." Dr. Johnson's *Dictionary*, the folio edition, said "*unguent*," ointment, &c., which was "*onguent*," was unctuous matter, to smear anything.

"Life and long health that gracious ointment gave,

And deadly wounds could heal, and rear again

The senseless corpse appointed for the grave."—*Spenser*.

That was precisely what Professor Holloway said his ointment would do. (Laughter.) He then referred to the same authority for the meaning of pomatum, and he found—"Pomatum, an ointment. 'I gave him a little pomatum to dress the scab.'" The learned counsel then referred to French dictionaries and treatises on pharmacy which gave the same definition of the words "*pommade*" and "*onguent*," and contended that "*pommade*" meant precisely the same thing as ointment, and was a pleasanter word. There was permission obtained to sell the ointment; it was not a secret remedy, and against the French law, because it had been analyzed, and the analysis stamped with an official stamp was affixed to the brevet. If there were some subtle ingredients in it which could not be detected, it was the same thing as if they were not there, so far as the French law was concerned. The learned counsel contended, that having got the permission desired, the plaintiff was entitled to the agreed reward of £500, or at all events to a *quantum meruit* of £150. The patent existed for 15 years, and had not expired by reason of the non-payment of fees.

On the 29th ult., Mr. Bovill, Q.C., appeared to support the rule in this case, to set aside the verdict, and enter it for the defendant.

The learned counsel contended that the defendant made a contract by letter to pay the plaintiff £500 if he could obtain him permission to sell Holloway's ointment in France and her colonies. If he failed to obtain that permission he was not to have anything. By the French law, which prohibits the sale of secret remedies, that could only be done by permission of the Minister of the Interior. This was not the obtaining of a common *brevet d'invention*, which anybody could get. Holloway's ointment was a secret remedy, and was so treated. To obtain a patent for it, it had been treated as a cosmetic, and called "*pommade*," and as the analysis showed that it contained only butter, lard, turpentine, and wax, the French had laughed at it, and said there was nothing noxious in that; it might be sold as a pomade.

Mr. Justice Williams said he should be ungrateful if he did not express his obligations to the pomade known as "*Pommade Divine*," from which he had frequently obtained benefit.

Mr. Bovill proceeded to contend that even the patent so obtained to sell "*Pommade dit Holloway*" was worthless, for when offered to the defendant by the plaintiff it was long after it had been granted, and when it had become void for the non-payment of certain fees.

The Chief Justice said that was a fatal defect, and on that ground the Court thought the rule ought to be made absolute, that when the plaintiff offered the patent to the defendant it was a void patent, and worth nothing.—Rule absolute.

The victorious Professor has written to the *Times* to state that the French analysis of his ointment, which made it out to be composed of "butter, lard, Bordeaux turpentine, white wax, yellow wax, and nothing else," is not correct, as at the trial he swore that three of these ingredients were not in it, and there were other components which the



analysis had not discovered. The letter goes on to state—"With respect to the grammatical 'slip' in one of my letters," [the "slip" referred to was in a letter of the defendant describing the nature of his pills, in which he stated "the pills 'is' a great purifier of the blood"] "dwelt upon by the plaintiff's counsel with so much unction, I may mention that the fact of my having employed a University graduate for some years past as my correspondent, will sufficiently show the mistake to have been purely clerical."

CLARK v. WATKINS—BREACH OF AGREEMENT.

This case, which came before Vice-Chancellor Sir J. Stuart on the 15th ult., was a motion for an injunction to restrain the defendant from carrying on business as a Chemist and Druggist in Dudley, in the county of Worcester, or elsewhere within the distance of seven miles thereof, and from soliciting or obtaining orders within such distance, as the traveller or agent of any other person, so long as the plaintiff had any interest in a business of a Chemist and Druggist carried on by him at Dudley. By an agreement dated the 2nd of April, 1860, and made between the plaintiff and the defendant, the defendant agreed to serve the plaintiff for the term of three years at a certain salary in the conduct of the plaintiff's business of a Chemist and Druggist at Dudley; and he also agreed, so long as the plaintiff had any interest in such business, not to carry on business as a Chemist and Druggist, either in his own name or for his own benefit, or in the name or names, or for the benefit of any other person or persons in Dudley or elsewhere within seven miles thereof, under the penalty of £500, to be secured by the bond of the defendant. By a bond of the same date as the agreement the defendant bound himself to the plaintiff that if he carried on business as above stated, or interfered either for his own benefit or for the benefit of any other person or persons with the plaintiff's business at Dudley, or the plaintiff's customers or connexions, he would, immediately after any such breach of the agreement, pay to the plaintiff the sum of £500. The relation between the plaintiff and defendant was determined on the 1st of November last by a notice in writing. The plaintiff complained that the defendant had, since he left his service in November last, solicited and obtained orders on behalf and for the benefit of persons other than the plaintiff within a distance of seven miles from Dudley, and filed his bill asking for an injunction as above stated.

Mr. Bacon and Mr. Westlake appeared for the plaintiff in support of the injunction.

Mr. Malins and Mr. Fischer denied that the defendant had committed any breach of his agreement with the plaintiff, and contended, that even if he had committed such breach, the plaintiff's remedy was at law by action of debt on the bond and not in this Court, inasmuch as the parties had themselves thereby assessed the damages which the defendant was to pay upon a breach of the agreement.

The Vice-Chancellor, referring to "*Sloman v. Watkins*" (1, *Brown's Ch. Cas.*, 418), said that where, as in the present case, the penalty of a bond was only to secure the enjoyment of a collateral object, this Court had jurisdiction, and granted an injunction in the terms asked.

JOSLING v. KINGSFORD—ADULTERATION.

This was an action tried before the Chief Justice, when the plaintiff had a verdict for £400.

In the Court of Common Pleas, on the 27th ult., Mr. Lush, Q.C., moved to set aside the verdict on the grounds of misdirection, improper reception of evidence, and because the verdict was against evidence. The action was for breach of warranty in supplying the plaintiff with a quantity of oxalic acid, which contained 10 per cent. of Epsom salts as adulteration, and produced injury in an article to be manufactured.

The Court refused the rule.

LAWFORD v. GAGE—MAUVE AND MAGENTA.

This case was heard in the Court of Common Pleas at the end of last month. The action was brought in fact to recover an amount alleged to be due on an account stated between the plaintiff and the defendant. The plaintiff, a straw plaiter, and the defendant, a chemist at Luton, entered into partnership together for the purpose of introducing straw plaits dyed with the colours mauve and magenta. At first they made money, but eventually the partnership was dissolved. The defendant took the stock and the debts of the firm, and the amount due, for the balance of which the plaintiff now sued, was ascertained between them. The defendant denied the alleged partnership, and said that the plaintiff had been paid all that was due to him. The jury found a verdict for the plaintiff for the amount claimed, which, with interest, amounted to £79 10s.

FARINA v. ZADIG—EAU DE COLOGNE.

This was a motion brought before Vice-Chancellor Sir W. P. Wood on the 12th ult., to commit the defendant for a breach of an injunction granted in July last, to restrain

him from selling eau de Cologne, with labels imitated or only colourably varied from the label of the plaintiff, the well-known Johann Maria Farina, residing opposite the Julichs Platz, Cologne (*gegenüber dem Jülichs Platz*), and using that description as one of the distinguishing features of his label. Upon the motion for an injunction the defendant appeared, and submitted to a perpetual injunction, which was accordingly awarded. Evidence was now adduced for the purpose of showing, that within three days after the service of the injunction had been effected upon him, the defendant had sold spurious eau de Cologne in Liverpool with a colourable imitation of the plaintiff's trade-mark label affixed to the bottles.

Mr. Daniel and Mr. Hetherington appeared in support of the motion to commit for breach of the injunction. The defendant, who had been served with notice of the motion, did not appear, and the case having been formally proved,

The Vice-Chancellor made the order. [We understand that the defendant is now suffering imprisonment for his offence against the Court.]

#### THE SECRET OF EAU DE COLOGNE.

In the early part of last month Arthur Newman, 42, dealer, was sentenced by the Recorder to three years' penal servitude, for conspiring together with one Richard Pearson, who had escaped, to defraud divers persons. From the evidence it appeared that this brace of swindlers had obtained goods from wholesale woollen merchants to the amount of nearly £4,000. After Newman had been found guilty of this great fraud he was indicted for unlawfully obtaining from Reginald Chauncey the sum of £10 and divers other sums. In this case the prosecutor was a retired officer in the Indian service, having a pension, and he had been carrying on business in the Opera Arcade. He made the acquaintance of the prisoner, who stated that he was empowered by the celebrated eau de Cologne manufacturer, Mr. J. M. Farina, to grant the right of making this article, and, for a sum of money to be decided upon, he would impart the secret to the prosecutor. By these pretences he obtained the sums named in the indictment, and others to the amount of £60. Prisoner also went so far as to introduce a man named Imhoff, who he stated was agent and partner of the celebrated eau de Cologne manufacturer, and who appeared to sanction the proceedings. The whole affair was, of course, an entire fraud, the man Imhoff being one of the prisoner's accomplices. The prisoner was found *Guilty*.

#### BAKER V. SAMPSON—AN UNHAPPY MARRIAGE.

This case was decided in the Court of Common Pleas on the 23rd ult. The plaintiff, a furniture dealer in Tottenham-court-road, sought to recover a sum of £20 15s., alleged to be due from the defendant, a chemist and druggist in New Cavendish-street, for furniture supplied to his wife, who was living apart from him, in lodgings, at 6s. 6d. a week. The real defence was that Mr. Sampson gave her a sufficient allowance, which she had agreed to accept. The plaintiff proved that the furniture was of the most simple nature, consisting of bedstead, bedding, chairs, and carpet, but admitted that he knew that Mrs. Sampson was not living with her husband. From the narrative given by Mrs. Sampson, it appeared that she had been most cruelly treated by her husband. Mr. Sampson, of course, told a very different story, and explained how he had been made wretched by his wife's unfounded suspicions and bad temper. As the learned Judge observed, it was quite clear that the marriage was a most unhappy one. Three questions were left to the jury:—First, were the goods supplied necessities? Secondly, was the agreement (if any) made, on the separation of the parties, clogged with conditions or not? Thirdly, was the allowance sufficient? The jury found that the goods were necessities; that there was no agreement whatever concluded for a separate maintenance; and that the allowance of £1 a week was not sufficient. Verdict for the plaintiff for £20 15s., the full amount claimed—the defendant to have leave to move on points raised during the trial. We may state that the defendant was formerly assistant to Mr. Pedler, of Fleet-street. In reply to a question by the Judge, he stated that he had sold his business in Cavendish-street for £850.

#### A CHEMIST CHARGED WITH FORGERY.

On the 30th ult., James Worthy, 23, described as "a chemist," was brought before the Lord Mayor at the Mansion-house, charged with forgery. It appeared that he was in the habit of calling on Mr. W. H. Stunt, a chemist, in Southwark-square, on matters of business, and in that way learnt the names of the wholesale firms with whom he dealt. Mr. Stunt had a printed form for ordering goods which he required in his trade, and some of the blank forms always lay loose on a desk in his counting-house ready for use. Several of these forms having been missed, and used in procuring goods in Mr.

Stunt's name, but without his authority, suspicion pointed to the prisoner, and in consequence a few of the papers were privately marked and hung up in the counting-house about the 13th of September last. It was alleged that between the 17th of that month and the 30th of December four of the printed forms, filled up in the prisoner's handwriting, and in the name of Mr. Stunt, were presented as orders for goods at the warehouses of Messrs. Rendall, spice merchants, in Eastcheap; Messrs. Hill and Jones, Jewry-street, wholesale confectioners; and Messrs. Warwick, merchants, of Garlick-hill; from all of whom Mr. Stunt had been in the habit of purchasing spices, essential oils, and other articles from time to time. The forged orders were delivered by a lad, not the prisoner, but not always by the same lad, and, believing them to be genuine, the merchants named invariably supplied the goods to the bearer, and which were of the value in the aggregate of between £18 to £20. The orders bore the forged initials of Mr. Stunt, jun., apparently in the prisoner's handwriting, and three of them the private test-marks which had been put upon some of the loose forms. The Lord Mayor committed the prisoner to Newgate for trial.—On the 3rd inst. the trial came off, the prisoner being indicted for feloniously forging two orders for the delivery of goods, with intent to defraud William Hill and another, and also for feloniously forging two other orders for the delivery of goods, with intent to defraud James Rendall and Robert Betson Warwick and others. The jury returned a verdict of *Not Guilty*.

#### SERIOUS CHARGE AGAINST A CHEMIST.

In the Central Criminal Court, on the 5th inst., Alexander Mackay, 41, chemist, was indicted for feloniously ravishing and carnally knowing Henrietta Warner, a girl 13 years of age. The jury, after some deliberation, returned a verdict of *Not Guilty*, and the prisoner was discharged. The case excited considerable interest in consequence of the position of the prisoner, he being the assistant medical officer to an institute at the eastern end of the town.

#### ACCIDENTS.

##### FIRE AT HOWARDS AND SONS' WORKS.

On the 6th inst., at a few minutes before noon, a fire broke out in the extensive premises belonging to Messrs. Howards and Sons, manufacturing chemists, situated in South-road, Stratford. The engines of the parish, one of the firm, and several of the London Brigade quickly attended, and a good supply of water having been obtained from the mains of the East London Company, they were set to work; but the fire continued to spread, and very shortly afterwards the still-house presented a mass of flame, threatening destruction to the boiler-house and also the fitting-house. Under the direction of Mr. Bridges, the foreman of the district, the two last-named buildings were saved, with trifling damage, but the still-house and its valuable contents were nearly destroyed. The fire was caused by the leakage from one of the stills, which allowed the spirits to run into the furnace beneath. Messrs. Howards and Sons were insured in the Phoenix Fire Office.

##### FIRE AT WANDSWORTH.

On Wednesday morning it was announced to Mr. Henderson, the chief officer of the D district of brigade in Southwark-bridge-road, by a mounted police officer, that a terrible fire was raging on the premises of Mr. E. Gemson, an extensive card manufacturer in Garratt-lane, Wandsworth. That officer at once started with two engines to the spot. Upon reaching the place he found that two parish engines and three belonging to private firms had arrived, and that the engine-house and glazing-room, consisting of 11 compartments, were in flames, as well as the drying-room, extending in length over 70 ft., of Messrs. R. Bell and Co., patent matchmakers. Fortunately the mains of the Southwark Company yielded an abundant supply of water, and not a moment was lost by the firemen in setting the engines to work. The hose of the various engines were also conveyed round the immense burning buildings, so as, if possible, to save the factory of Messrs. Bell and Co., it being manifest from the first that the premises belonging to Mr. Gemson could not be saved, for the flames were rushing out of every window and through the roofs, illuminating the district for miles around. By unceasing perseverance on the part of the firemen, they soon succeeded in allaying all fears as to the safety of Messrs. Bell's premises, and they managed to cut off the fire in that direction, the only damage done to the factory being to the lath and plaster partition, which, with the contents, sustained some damage from water. The fire was not extinguished until a great amount of property had been destroyed.

##### DEATH FROM OIL OF VITRIOL.

On the evening of Sunday, the 8th ult., a man named John Willan, employed in the

gasworks at Preston, as foreman of the firemen, and night attendant to the ammonia still, met his death under the following circumstances:—It was his duty to supply the still, when necessary, with oil of vitriol, which he had to pour into the still from large carboys holding about 10 gallons each. In order to do this he had to ascend a platform raised about 7 ft. above the ground, and on a level with the mouth of the retort. It is conjectured that he went to the top of the platform about 10 o'clock for the purpose of filling the retort, and then, while holding the carboy, which was half full of vitriol, he stepped back incautiously and slipped off the platform, which was not railed round or defended in any way. In his fall he must have dragged the carboy with him, and the burning liquid poured down upon his face and the front of his body. About half-past 10 o'clock a person going past the gasworks heard some one moaning inside. Assistance was procured, and the still-room was entered, when the unfortunate man was found lying on the ground just under the platform in a pool of vitriol, which was gradually consuming his body and clothing, the glass vessel that had held the vitriol being close to him, smashed into pieces by its fall. Medical aid was speedily procured, but it was of no avail, for the unfortunate creature, who never spoke from the time he was found up to his death, expired at 4 o'clock on the following morning, in the greatest agony. He had been employed at the gasworks for many years.

### GENERAL NEWS.

#### SOIRÉE OF THE GLASGOW CHEMISTS AND DRUGGISTS.

The annual *soirée* of the chemists and druggists of Glasgow was held on Thursday evening, January 29th, in the Scottish Exhibition Rooms, the large hall of which was quite filled by a gay assemblage of gentlemen and ladies, most of whom were in ball costume. Amongst the company were many representatives of the profession from the country. Jno. Campbell, Esq., of the Apothecaries' Company, was in the chair, and on the platform were Dr. E. Milner, Dr. A. M. Robertson, Dr. Morton, Dr. Wilson, Dr. Pritchard, Dr. Tannahill, and Messrs. McCall, Levy, and Tait. After tea, the Chairman, in addressing the meeting, congratulated those present on the growing success of their annual re-unions, and especially complimented the committee for their exertions in getting up the festival. They had on the present occasion to regret the absence from amongst them of one who at the last meeting addressed them, who commanded universal admiration and esteem, but had now passed away. He alluded to Dr. Joseph Bell, who had ever shown himself to be the friend of the druggist, and who could never be forgotten by those whose good fortune it was to secure his services. During the year the Chemists and Druggists' Association, formed by the young men in connexion with the trade for the purpose of mutual culture, had been progressing well, the association now numbering upwards of sixty members, for some of whom he could safely predict a glorious future, hitherto undeveloped talents being displayed by some of them, that, if it but cultivated, would make them of note in the world. He concluded with a few humorous remarks anent that fertile subject for humour at social meetings—the ladies. Dr. Morton afterwards addressed the meeting, urging the association spoken of by the chairman to turn their attention to the investigation of drug adulteration, and with that object to form a Pharmaceutical Museum, where, by comparison and experiment, the adulterated article might soon become known at sight, even to the inexperienced apprentice to the trade. A. T. Machattie, Esq., subsequently spoke. The proceedings were enlivened throughout by songs, sentimental and comic, sung by amateurs connected with the trade—two of whom, Messrs. Bremner and Graham, deserve especial mention, as having not only splendid voices, but evidently, also, a thorough knowledge of music. Mr. Moffat, the well-known and admired reader, read Mrs. Heman's "Lady of Provence," with exquisite taste. A ball, attended by upwards of fifty couples, followed the *soirée*, and dancing was kept up till a late hour in the morning.

#### LEEDS CHEMISTS' ASSOCIATION.

On Monday evening, January 12th, the first ordinary meeting of the above association was held in the Barristers' Room, at the Town Hall, when there was a large attendance. The rules of the new society having been adopted, the president, Mr. Harvey, proceeded to deliver the inaugural address. He alluded to the peculiar combination of the characteristics of a profession with a trade united in the calling of pharmacy, and to the necessity for association which must be felt by those engaged in it. Considering the rapid strides of science, it was impossible that a class of men whose duties were so intimately dependent upon science as were theirs should neglect the facilities given by association for the interchange of thought and knowledge. The aims of the association were modest, and appeared to him to be feasible. They were, the establishment of periodical evening meetings during the winter, for the introduction and discussion of papers upon subjects connected with pharmacy, the formation of classes amongst the



young men for the study of chemistry, botany, materia medica, &c., and the establishment of a library. Such educational advantages would react in favour of the town which supplied them, and would attract to Leeds the class of assistants who would be the most earnest students, and the best servants. A retrospect of the past forty years showed that advances had been made by chemistry, scarcely second to the discovery of the powers of steam. The rise and development of our alkali manufacture; the revolution in the materials employed for illumination consequent upon Chevreul's discovery of the composition of fatty bodies; the still later appearance of paraffine and natural mineral oils as substitutes for older kinds; the production of aniline and its countless and unrivalled dyes from the despised coal-tar of our gas-works; and the application of similar waste matters to the production of perfumes and flavours—all these were illustrations of the marvellous powers wielded by chemistry. It was shown that out of 130,000 described species of plants, only 400 are comprised in the *Materia Medica* of Europe, and the valuable and potent qualities of many of these point to the efficacy which might be found in many of the remainder. With relation to the medical profession, Mr. Harvey laid down the principle that his hearers were something more than unreasoning instruments for following out instructions given. He believed that they ought to be intelligent coadjutors of the physician, to whom the latter might appeal for skilled knowledge in supplying remedies in the state best calculated to answer their object. The chemist was always liable to be appealed to by the public for information respecting articles with which he supplied it. With reference to sanitary measures, there were various preparations offered as disinfectants, and it was an imperative duty that a chemist should possess such a knowledge of their *modus operandi* as to enable him to give discriminating advice as to which should be employed. The President deprecated the idea of making the association a power for enforcing early closing, or uniformity of prices, &c. The opportunity of meeting together which it would afford to its members, could not fail to influence them for good in the direction of desirable improvements, and would establish mutual good feeling. But the class interested perhaps more than any other in the success of the association were the young men. Let them earnestly avail themselves of every opportunity of improvement thus offered; the loss of an hour in seed-time was the loss of days in harvest. The best thanks of the meeting were voted to the President for his address, and it was ordered to be printed *in extenso*. The association has already enrolled about sixty members and associates.

#### GOSSIP.

The manufacture of chemicals has greatly increased in the suburbs of Paris. The factories established there within the last few years are in a flourishing condition, and the acids, salts, and other products supplied by them are not only sought for home consumption, but for exportation to Belgium and Switzerland.

At the Royal Institution, on the 30th ult., his Eminence Cardinal Wiseman delivered a discourse on the "Points of Contact between Science and Art." The theatre was crowded to excess.

The French Government has published a classified list of the convicts at Toulon. It is satisfactory to find that there were but three apothecaries and druggists among the 3,010 convicts in the *bagne* on the 1st of January, 1862.

A number of letters written by eminent medical men have recently appeared in the daily journals, calling attention to the common practice of conveying cases of small-pox and other infectious diseases in ordinary street cabs. The writers recommend the adoption of special carriages for conveying these cases to the hospitals.

#### UNITED SOCIETY OF CHEMISTS AND DRUGGISTS.

The half-yearly meeting of the General Committee of this Society was held at the London Coffee House, Ludgate-hill, on the 17th ultimo; Henry Matthews, Esq., Fellow of the Chemical Society, and Vice-President, in the chair. There was a very numerous attendance. A report was made from the Executive Committee explanatory of the position of the Society, and showing a steady accession of members, which was principally attributed to the different public meetings of the trade throughout the provinces; and that although a large but necessary responsibility had been incurred, the Executive had the pleasure of stating, that by the kind assistance of the country members, the expenses had been all defrayed.

Mr. Barnaby, the Local Secretary of the Society at Rochester, was introduced by the Chairman to the meeting as having a proposition that a Legal Defence Fund should be created. Mr. Barnaby explained the operation and probable expense.

The meeting concurring in the practicability of the scheme, and its relation to the objects of the Society, agreed that it should be promoted by the proposition being intro-

duced into the next General Report of the Society, for the optional adoption of the members generally.

A discussion then ensued, in which the operations of the Executive were commended, and the following resolutions unanimously agreed to:—

"That at this meeting the General Committee are glad to remember that it was the Executive of the United Society of Chemists and Druggists *solely* that organized and promoted the movement to induce the Legislature during the past session to relieve *all* Chemists and Druggists from Jury service, but they regret they were thwarted by a proposition to limit the exemption to members of the Pharmaceutical Society only; and they pledge themselves to support the future exertions of the Executive in overcoming such unjust and partial legislation.

"That the General Committee, in endeavouring to carry out by district meetings and combined action any improvement that may be deemed necessary for the welfare of the trade, recommend the healthy independent action of the district associations; but in so doing, they desire to impress upon all the members of the Society the vital necessity of a consistent adhesion to its objects, namely, the creation of a Benevolent Fund, the furtherance of trade interests, and (when strengthened by further means) the promotion of scientific education of a persuasive and non-compulsory character."

A vote of thanks was cordially presented to the different Local Secretaries for their efficient and energetic exertions, amongst whom were the following gentlemen:—Messrs. Barnaby, Rochester; Manby, Southampton; Banks and Snape, Birmingham; Buck, Liverpool; Wallworth, Birkenhead; Gibbons and Wyld, Manchester; Mitchell, Bristol; Blain and Hall, Bolton; Squire, Nottingham; Woodcock, Lincoln; Harding, Bath; Boast, Bradford; Yewdall, Leeds; Walpole, Yarmouth.

The arrangements for the forthcoming Festival of the Society were then alluded to, every gentleman present promising to act as a steward; and it was agreed that ladies should also be invited.

[Since the foregoing, we are informed that the Executive have determined that the Festival shall take place in March next, and full particulars will be announced in our next number.]

## GAZETTE.

### BANKRUPTS.

Buncombe, Robert, Brompton-row, Knightsbridge, chemist.  
 Johnston, Robert, Liverpool, drysalter.  
 Knowles, Robert, Rochdale, chemist.  
 Schofield, Thomas, Rochdale, druggist.  
 Warwick, Thomas, Camberwell New-road, chemical agent.

### PARTNERSHIPS DISSOLVED.

Allen, S. and G., Cowper-street, Finsbury, drug grinders.  
 Allen, G. and Co., Ampthill, Bedfordshire, manufacturing chemists.  
 Flower and Scott, Mincing-lane, drysalters.  
 Harrison, J. M., and the late G. Hulley, Chesterfield, wholesale chemists.  
 Holliday, T. and Co., Huddersfield, colour manufacturers.  
 Hutchinson and Earle, Widnes, Lancashire, manufacturing chemists.  
 Knight and Knight, Rood-lane, City, wholesale drysalters.  
 Palmer, C. F., and H., Birmingham, chemists.  
 Parker and Frost, Derby, chemists.  
 Rayson, Seth, and Co., Harpurhey and Blackley, Lancashire, manufacturing chemists.  
 Walton, J. Brice, and Co., Halifax, druggists.



*Liq. Hydrag. et Arsenici Hydriodot.*—(E. L. B.)—This is of a pale yellow colour when first made, but becomes colourless if kept for a length of time. Your second query, relating to

*Decoctum Cinchona*, stands thus: "What quantity of decoction is it intended that 3x. of cinchona shall make? It is ordered to boil for ten minutes, but the formula does not state how much it is to be reduced—or if it is to be made up to f. 3xx. afterwards." It should be made up to Oj. with water, after the decoction.

*Extractum Copaibæ*.—"A Druggist" asks us to inform him of the best means of reducing *Extract. Copaibæ Res.* to the consistency of *Balsam Copaibæ*. This is one of those questions only to be solved by experiment. We know of no agent but spirit, and are not sure that that would answer the purpose.

*Unguentum Hydrargyri Nitratæ*.—(M.S., Clonmel).—The formula for Citrine Ointment in the London Pharmacopœia is a very good one, if the specific gravity of the acid used be attended to. The heat also should not exceed 200°—ranging from 180° to 200°. When skilfully prepared, this formula furnishes a very nice article of good colour and consistence. The following is a formula in the U.S. Pharmacopœia :—

"R. Mercurij, ʒj.  
Nitric Acid, f. ʒxiv.  
Fresh Neat's-foot Oil, f. ʒix.  
Lard, ʒiij.

Dissolve the mercury in the acid; then heat together the oil and lard, in an earthen vessel to 200°; lastly, add the mercurial solution, and stir with a wooden spatula constantly so long as effervescence continues, and afterwards occasionally, until the ointment stiffens."

This is said to be a good formula, but we have never used it. We adopt the London form, and find it answers very well if proper care be taken.



THE UNITED SOCIETY AND ITS TRADUCERS.

2, Bell Yard, Doctors' Commons.

February 10th, 1863.

SIR,—As the officer appointed by the Executive Committee of the United Society of Chemists and Druggists to call public meetings and to promulgate the principles and objects of that institution in the provinces, it may not be inappropriate in me to repel the disparaging insinuations of the writer of the leading article in the last month's number of the *Pharmaceutical Journal*, and to show how baseless is the fabric of his conclusions.

The journalist has availed himself of an address circulated by the Manchester Association in their own district, which, I am sure, was adopted by their Committee in perfect allegiance to the principles and objects of the Parent Society; but by assuming that the objects it sets forth can only be obtained by arbitrary means, he has led himself and his readers to the erroneous conclusion that our Society, hitherto heterodox in its voluntarism, is now converted to the orthodox doctrine of exclusiveness, and invites us to repent, recant, and be forgiven. A simple statement of the circumstances which led to the "manifesto" will dissipate this delusion, and assist your readers to a correct interpretation of its meaning.

Several important meetings of our Society have been held in Manchester, at which resolutions have been adopted. I extract from my minutes the following :—

"1st. That the Chemists and Druggists of

Manchester and the neighbouring towns now assembled, approve of the principles of the United Society of Chemists and Druggists, and hereby form themselves into a District Association to promote the objects of that Institution.

"2nd. That the Chemists and Druggists now present tender their thanks to the Executive Committee of the United Society, for their strenuous efforts to obtain for them exemption from Jury service, and protest against the partial legislation which has limited that exemption to members of the Pharmaceutical Society, as being unsound in principle and unjust in practice, as creating an artificial distinction between equally qualified tradesmen, and as degrading and insulting to the trade.

"3rd. That the gentlemen constituting this meeting consider it to be the duty of Chemists and Druggists as a body of tradesmen to make a provision for their necessitous poor, and pledge themselves to aid the Committee in promoting a public meeting annually on behalf of the Society's Benevolent Fund."

Now, the first of these resolutions was moved by Mr. Alderman Goadsby, the second was moved by Mr. Alderman Bowker, and all three were enthusiastically and unanimously adopted at a meeting which included much of the respectability and intelligence of the trade. Two or three days after the last public meeting, a committee meeting was held, at which it was deliberately agreed that an address in accordance with these resolutions should be circulated in the district.

To accept the interpretation of this

journalist, your readers must believe—if they can—that these gentlemen first adopted resolutions as much opposed to the arbitrary practice of the Pharmaceutical Society as words could render them, and immediately afterwards adopted, signed, and circulated an address in perfect accordance with it.

From such a conclusion, every reader who knows the high-minded, intelligent, and honourable gentlemen thus implicated, will start with indignation. To understand this document aright, the reader has only to look at it in the light of our voluntary principles. We object not to a uniform apprenticeship bond, nor to boards of examination, much less do we object to educational qualification, so long as these tests emanate from the trade; but we do object to, and will oppose, every attempt to render them compulsory upon men already in business. To permit a small minority to say to the majority of their fellow-tradesmen, "Come, leave your business at any amount of cost or humiliation, and be examined as to your qualification to be members of our Society, or we will brand you as ignorant and unqualified persons," is to foster a tyrannous oligarchy in a free country.

If it be true, as the writer intimates, that language of severe reprehension in relation to the Pharmaceutical Council has been used at various meetings of the United Society without a justification; that our Society commenced with no reference to education, and now proposes "an imitation of machinery already in existence;" if it be true that the trade is represented by, or is under any obligation to the Pharmaceutical Society, that a man may obtain the full position of a member of that society for ten guineas, and, that "the want of a competent practical knowledge of pharmaceutical and general chemistry constitutes the only bar to admission," then the non-necessity for "two societies having one object" may be admitted; but to all these assertions I am prepared to give an unqualified denial.

It was not until epithets of opprobrium were hurled at us with rancorous volubility that we made allusions at our public meetings to the leaders of the Pharmaceutical Society, "in no very flattering terms." We did not establish our Society without reference to education—on the contrary, we intended from the first that a Chemists and Druggists' College should be the crowning stone of our institution; but we had not, nor have we the slightest idea of imitating the Pharmaceutical machinery, which twenty-one years' practical experience has proved utterly worthless.

In what sense can it be said the trade is under any obligation to the Pharmaceutical Society? The journalist admits that—

"The Chemists and Druggists of 1841 were brought together first on a purely trade question—to protest against the restrictions which Mr. Hawes's Medical Bill would have inflicted upon them."

It was then, he says, sought to make permanent a union so auspiciously begun; but it is to be lamented that the means they adopted alienated the trade they professed to unite. Instead of conciliating their brethren by a general act of incorporation, as was the case with the Apothecaries, they procured a Royal Charter for a few individuals, who admitted the trade only upon conditions calculated to establish a rich and exclusive institution. As to their much-vaunted service upon the Poisons Bill, "the less said about that the better."

What obligation can the trade be under to men, who, having assumed a "fancy title," and fenced themselves round with artificial distinctions, have deliberately insulted them, and become jubilant at the success of a strategy to exclude them from a common right? Instead of a man (even a single man, unencumbered by business) obtaining a "full position" in the Pharmaceutical Society by the payment of ten guineas, if he be a provincial, it will cost him at least fifty guineas, besides the subscription of one guinea per annum; whilst the qualified Chemists who constitute the trade are practically excluded. What can this unscrupulous writer mean by saying that "the want of competent knowledge is the only bar to admission"? I could find, in almost every important town in the kingdom, Chemists whose competency would, in comparison, put the majority of Pharmacutists to shame. Clearly their exclusion is not caused by want of knowledge, but by terms of admission which to them are impracticable; and when I denounce this assertion as an audacious calumny, my denunciation will meet with an approving response from one end of the country to the other.

The United Society is a necessity to the trade, because—1st. The majority of them cannot be members of the Pharmaceutical Society if they would.

2nd. That Society could not benefit them if they were members of it.

3rd. They want a Benevolent Fund within the reach of their poor brethren.

4th. They desire a college for the education of the rising generation of Chemists.

5th. They recognise Christian obligations, such as an observance of the Sabbath, and a reasonable allowance of time to assistants and apprentices for mental improvement and bodily recreation.

6th. They want it also as a bond of brotherhood, and a power to elevate and protect them; and believing that matters of general interest to the trade (many of



which are declared beneath the notice of the Pharmaceutical Council) should not be left to individual judgment, they would have it to be their beneficent guardian, ever watchful over their interests.

Such an institution the United Society of Chemists and Druggists will be, if it only prove faithful to its mission. It already outnumbers the Bloomsbury Society, whose leaders first treated it with contempt, then called in the *Lancet* to abuse it, and now authorize their scribes to write it down. I fear it is too late for a more conciliatory policy to prevail. I hope not. There is yet a spot of neutral ground remaining, but will they see it? Had Jacob Bell been living, his liberal and sagacious mind would have rejoiced to contemplate the trade roused from the lethargy he so much deplored, and turned this movement to good account; but the Pharmaceutical Council say they are liberal enough, and will not advance, whilst the leaders of the United Society are for progress, and will not fall back.

But a little more than two years ago, a few rills of thought trickling through the columns of the CHEMIST AND DRUGGIST indicated the rise of the United Society. Like a river it now streams through the country. The men whose energy has roused the trade from chronic apathy, and surmounted the more formidable difficulties inseparable from a great work and little means, will not grow weary in well-doing, nor relax in their efforts until the United Society of Chemists and Druggists shall have become an acknowledged fact amongst the useful institutions of the country.

I am, sir,

Your obedient servant,

CYRUS BUOTT,

Manager of the United Society  
of Chemists and Druggists.

#### ARMY DISPENSERS OF MEDICINES.

SIR,—Allow me, through the medium of your widely-circulated Journal, to refer to the leading article in the January number of the *Pharmaceutical Journal*, which states that it is necessary to have the Pharmaceutical Society's certificate of qualification to obtain the honourable position of Army Dispenser of Medicines. The writer appears to hold out as a tempting bait to aspiring young students an appointment which is really unworthy the acceptance of a Pharmaceutical Chemist.

If Medical Officers of the army are aggrieved, or their position affected in any way, the medical journals and schools induce the young members of the profession to refrain from entering the service until they obtain those rights to which their professional attainments entitle them. In like

manner, ought not the leaders of the Pharmaceutical Society to act and advise their brethren to refuse appointments which only lead to vexation, discomfort, and disappointment?

Let me bring under their notice the treatment these gentlemen receive from the commissioned Army Medical Officers, and the especial injustice to three dispensers, lately reduced, after nearly six years' service in every quarter of the globe, and who have proofs of having conducted themselves in a highly efficient and creditable manner. These gentlemen have been suddenly and not very politely informed that they are now no longer required, by which treatment they are placed on a level with dockyard labourers. This is not the first time that gentlemen have been so treated, when under the impression that their appointments were permanent.

Apparently, dispensers can be reduced at any moment, no matter how long they have served, or what their claims may be; and this without compensation. They are thus thrown upon the world, and, after so many years' service, are totally unfitted for any civil employment. Some may be induced to enter, in the idea of saving money and leading an easy kind of life for the time being. Let me undeceive such, for the expenses entailed in the service preclude the possibility of saving anything, except under favourable circumstances; and during active service, when dispensers are most required, the life is by no means an easy one, as those who served in India during the mutiny, or in China, can amply testify.

The Pharmaceutical Society do not appear to be aware that this new field of ambition consists in nineteen appointments only, with the prospects of vacancies remote indeed; that of course those reduced have the option of coming in again before a fresh application can be entertained; and that dispensers are not allowed half-pay retiring allowances, or their widows pensions, like any other branches of the naval or military service.

Let me suggest that the Pharmaceutical Society demand from the Army Medical Department that position for its members when entering the army service to which they think their qualification of Pharmaceutical Chemist entitles them, namely, that of professional men.

With reference to the treatment of dispensers by Army Medical Officers, they appear to have some ridiculous prejudice against them, and do all in their power to make their duty irksome and their position uncomfortable.

Apologizing for the length of my communication,

I remain, Sir,

Yours respectfully,

PHARMACEUTIST.



London, Feb. 13th, 1863.

THERE has been more business done since the commencement of the year in Chemicals, the wholesale houses buying with more freedom; but since the advance in the rate of discount by the Bank of England trade has been rather quieter. On the whole, prospects look more cheerful, prices being low, and the stocks held by most houses moderate. A good business continues to be transacted in Tartaric Acid at 1s. 6½d., and small parcels at 1s. 7d. on the spot; also several sales made at 1s. 6¾d. forward. Citric Acid moves off, standing at 1s. 6½d. to 1s. 6¾d. A fair business has been done in Oxalic Acid at 8½d. to 8¾d.; the former rate is now the quotation. Small sales have been made in Sal Acetos at 10½d. Chlorate of Potass is nominal at 13d., and very little doing. Bichromate remains dull and nominal at 7d. Prussiate of Potass is very quiet at 12d. Several sales of Iodine have been made at 4d. to 4½d., and last week a few kegs seconds sold at 3¾d. A large business has been done in Alum up to £7 10s. to £7 15s.; the market is now quiet at £7 5s. in brls. Sulphate of Copper is rather lower; small sales are making at 31s. Sal Ammoniac is rather cheaper; the latest sales were at 35s., 37s. 6d., and 38s. Cream Tartar is dull, and rather lower, sales with difficulty made at 115s. to 117s. 6d. for fine. In Soda Crystals a good business has been done, and the price is steady at 92s. 6d. ex ship. Ash is steady at 2d. A good business has been done in Sulphate Quinine at 6s. to 6s. 3d. for Pellitiers. In other kinds there is no change from last month. Resin is dull and easier; the last sales made were at 22s. for common French, and 27s. for ordinary American. Turpentine is lower and dull; some French sold at 95s., and American at 110s., at which the latter is now nominal. Petroleum has continued dull, and prices have gradually declined; the last prices quoted for crude Pennsylvania was £18 to £19, and Canadian £11 to £12; refined has also declined to 2s. per gallon, and very little doing. Large sales made in Linseed Oil at considerably higher prices; the demand is now quieter, and the price closed at 44s. 6d., and at Hull 44s. to 44s. 3d. Rape is also dearer, foreign refined 56s. to 56s. 6d., and brown 53s. to 53s. 6d. No change in Ashes.

At the various Drug sales offered during the month, a fair proportion of the goods sold. Large parcels of Castor Oil sold at ¼d. per pound lower prices; middling to fine pale 5½d. to 6½d. Oil Cassia remains dull at 8s. to 8s. 6d. Large sales of Oil Aniseed have been made at from 5s. 3d. to 5s. 6d.; at the latter price there are now buyers. Good and fine flat Yellow Bark is 3s. 6d., and quill and other sorts are 1d. to 2d. dearer. Cardamoms sell freely at previous terms. A large business has been done in Camphor at the reduced rates of £5 2s. 6d. up to £6 10s. for ordinary to fine. Balsam Capivi is rather cheaper; good quality selling at 1s. 6d. to 1s. 6d.

## PRICE CURRENT.

These quotations are the latest for ACTUAL SALES in Mincing Lane. It will be necessary for our retail subscribers to bear in mind that they cannot, as a rule, purchase at the prices quoted, inasmuch as these are the CASH PRICES IN BULK. They will, however, be able to form a tolerably correct idea of what they ought to pay.

	1863.				1862.					1863.				1862.			
	s.	d.	s.	d.	s.	d.	s.	d.		s.	d.	s.	d.	s.	d.	s.	d.
ARGOL, Cape, pr ct.	85	0	102	6	100	0	110	0	BRIMSTONE,								
French	40	0	.60	0	60	0	.85	0	rough.....per ton	135	0	0	0	155	0	0	0
Oporto, red	45	0	.48	0	45	0	.50	0	roll.....	190	0	0	0	270	0	0	0
Sicily	70	0	.78	0	65	0	.80	0	flour.....	240	0	260	0	310	0	0	0
Naples, white	65	0	.80	0	65	0	.80	0	CHEMICALS,								
Florence, white	90	0	.97	6	90	0	100	0	Acid—Acetic, pr lb	0	3½	0	4½	0	4	0	4
red	80	0	.85	0	85	0	.87	6	Citric	1	6½	1	6½	1	8½	1	9
Bologna, white	110	0	115	0	115	0	120	0	Nitric	0	4	0	5	0	3½	0	4
ARROWROOT,									Oxalic	0	8	0	8½	0	8½	0	10
duty 4½ per cwt.									Sulphuric	0	0½	0	0	0	0½	0	0
Bermuda.....per lb.	1	2	1	8	0	11	1	4	Tartaric crystal	1	6½	1	6½	1	8½	1	9
St. Vincent.....	0	4	0	7	0	2½	0	5½	powdered.	1	7	1	7½	1	9	0	0
Jamaica.....	0	4½	0	5½	0	2½	0	4	Alum.....per ton.	145	0	147	6	135	0	140	0
Other West India.	0	4	0	5	0	2½	0	3½	powder	0	0	0	0	160	0	0	0
Brazil.....	0	2	0	4	0	1½	0	2	Ammonia. Crb. lb.	0	5½	0	6	0	5½	0	6
East India.....	0	2½	0	4½	0	1½	0	2½	Sulphate per ton	290	0	310	0	270	0	290	0
Natal.....	0	4½	0	5½	0	2½	0	7	Antimony, ore.....	200	0	230	0	0	0	0	0
Sierra Leone.....	0	3	0	5½	0	2½	0	3	crude, per cwt	24	0	.28	0	26	0	.28	0
ASHES.....per cwt.									regulus	43	0	.43	6	40	0	0	0
Pot. Canada, 1st sort	34	6	0	0	39	0	0	0	French star.....	43	0	0	0	47	0	0	0
Pearl, do. 1st sort.	33	6	0	0	38	0	0	0	Arsenic, lump....	17	6	0	6	17	0	.18	6

## PRICE CURRENT—continued.

CHEMICALS.				1863.				1862.				DRUGS.				1863.				1862.			
	s.	d.	s. d.		s.	d.	s. d.		s.	d.	s. d.		s.	d.	s. d.		s.	d.	s. d.		s.	d.	s. d.
Arsenic powder ..	6	6	7 0		8	6	10 0	Cardamoms, inferior	5	8	6 8		5	8	6 8		4	0	4 8		4	0	4 8
Bleaching Powder ..	9	0	9 6		8	6	9 6	Madras.....	3	6	5 8		3	4	4 9		3	4	4 9		3	4	4 9
Borax, E. I. refined ..	52	6	0 0		0	0	0 0	Ceylon.....	4	9	5 0		4	9	5 0		4	4	4 6		4	4	4 6
British.....	50	0	.52 0		64	6	.65 0	Cassia Fistula pr ct.	15	0	.61 0		13	0	.23 0		13	0	.23 0		13	0	.23 0
Calomel...per lb.	2	9	0 0		2	10	0 0	Castor Oil, 1st pale, lb	0	6	0 0		0	64	0 7		0	64	0 7		0	64	0 7
Camphor, refined ..	1	7	1 9		2	8	2 10	secoud.....	0	54	0 54		0	54	0 54		0	54	0 54		0	54	0 54
Copras, grn. pr. tu.	60	0	0 0		65	0	0 0	iuf. & dark .....	0	44	0 54		0	54	0 54		0	54	0 54		0	54	0 54
Crrsiv. Sublmt. lb	1	11	0 0		1	11	2 0	Bombay, in cks.	0	0	0 0		0	0	0 0		0	0	0 0		0	0	0 0
Green Emuld. pr lb	0	0	0 0		0	9	0 11	Castorum .....	1	2	.26 0		1	0	.26 0		1	0	.26 0		1	0	.26 0
Brunswk. cwt.	0	0	0 0		14	0	.42 0	China Root, pr ct.	10	0	.15 0		10	0	.15 0		10	0	.15 0		10	0	.15 0
Iodine, dry, pr. oz.	0	34	0 4		0	44	0 5	Coculus Indicus ..	10	0	.12 0		14	0	.15 0		14	0	.15 0		14	0	.15 0
Magnesia Crbn. ct.	42	6	.45 0		42	6	.45 0	Cod-liver Oil, gal..	4	2	6 0		5	0	6 3		5	0	6 3		5	0	6 3
Calcined, lb....	1	6	1 8		1	6	0 0	Cleynth. apple, lb.	0	8	1 0		0	7	1 0		0	7	1 0		0	7	1 0
Minium red, pr. ct.	22	0	.22 6		22	6	.23 0	Colombo Rt. pr. ct..	15	0	.49 0		15	0	.48 0		15	0	.48 0		15	0	.48 0
orange.....	32	0	.33 0		35	0	0 0	Cream Tartar, pr ct.															
P'tsh. Bichrom. lb.	0	7	0 0		0	84	0 84	French .....	115	0	117 6		127	6	130 0		127	6	130 0		127	6	130 0
Chlorate .....	1	1	0 0		0	104	0 0	Venetian .....	117	6	0 0		0	0	130 0		0	0	130 0		0	0	130 0
Hydriodate oz.	0	5	0 54		0	5	0 54	grey .....	110	0	0 0		115	0	120 0		115	0	120 0		115	0	120 0
Prussiate .lb.	1	0	1 04		1	04	1 1	brown .....	100	0	105 0		105	0	110 6		105	0	110 6		105	0	110 6
red.....	2	1	2 2		2	2	0 0	Croton Seed .....	45	0	.69 0		90	0	105 0		90	0	105 0		90	0	105 0
Precipit. red pr. lb	2	9	0 0		2	9	2 10	Cubeb.....	105	0	110 0		110	0	130 0		110	0	130 0		110	0	130 0
white.....	2	9	2 10		2	10	0 0	Cumin Seed .....	30	0	.38 0		45	0	.55 0		45	0	.55 0		45	0	.55 0
Prussian Blue....	1	0	1 10		1	6	1 10	Dragon's bld. reed.	200	0	320 0		300	0	240 0		300	0	240 0		300	0	240 0
Rose Pink....pr ct.	29	0	0 0		29	0	.30 0	lump.....	90	0	260 0		170	0	200 0		170	0	200 0		170	0	200 0
Sal-Acetos....pr lb.	0	104	0 0		0	104	0 11	Galangal Root.....	24	0	.32 0		20	0	.23 0		20	0	.23 0		20	0	.23 0
Ammoniac, ct.								Gentian Root .....	21	0	.22 0		19	0	0 0		19	0	0 0		19	0	0 0
British.....	35	0	.38 0		36	0	.38 0	Guinea Grains, ....															
Epsom.....	5	0	8 6		8	3	8 6	per cwt.....	47	0	.52 0		48	0	.52 6		48	0	.52 6		48	0	.52 6
Glauber.....	5	0	5 6		5	6	0 0	Honey, Narbonne.	60	0	.84 0		60	0	.85 0		60	0	.85 0		60	0	.85 0
Soda, Ash, pr deg.	0	2	0 24		0	24	0 24	Cuba .....	24	0	.36 0		23	0	.36 0		23	0	.36 0		23	0	.36 0
Bicarbonate, ct.	12	0	.12 6		12	0	.13 0	Jamaica .....	26	0	.75 0		30	0	.80 0		30	0	.80 0		30	0	.80 0
Crystals per ton.	92	6	0 0		92	6	.95 0	Ipecacuanha, pr lb.	7	0	7 4		6	3	6 8		6	3	6 8		6	3	6 8
Sgr. Lead, white, ct.	37	0	0 0		37	0	.38 0	Isinglass, Brazil..	0	10	3 10		0	9	3 10		0	9	3 10		0	9	3 10
brown.....	35	0	0 0		38	0	0 0	East India.....	0	9	3 0		0	6	3 2		0	6	3 2		0	6	3 2
Sphate. Quinine oz								West India .....	3	0	3 0		3	0	3 9		3	0	3 9		3	0	3 9
British in bott.	6	6	0 0		6	6	0 0	Russian .....	9	6	.13 0		11	6	.13 0		11	6	.13 0		11	6	.13 0
Foreign .....	6	2	0 6		5	9	5 10	Jalap .....	1	0	.5 0		1	6	4 7		1	6	4 7		1	6	4 7
Sulphat. Zinc, cwt.	14	6	.15 0		14	6	.15 0	Juniper Berries, cwt.															
Verdigris.....lb.	1	1	1 3		1	3	1 5	German & Frnch ..	8	0	9 0		9	0	10 0		9	0	10 0		9	0	10 0
Vermilion, English	2	8	3 1		3	0	3 4	Italian .....	8	0	.10 0		10	0	.12 0		10	0	.12 0		10	0	.12 0
China .....	2	2	2 4		2	6	2 8	Limon Juice, pr deg.	0	04	0 0		0	04	0 04		0	04	0 04		0	04	0 04
Vtrl. blue or Romn.								Liquorice, per cwt.															
per cwt.	31	0	.32 6		35	0	.36 0	Spanish .....	83	0	.90 0		83	0	.90 0		83	0	.90 0		83	0	.90 0
COCHINEAL, pr. lb.								Italian .....	85	0	.95 0		85	0	.95 0		85	0	.95 0		85	0	.95 0
Honduras, black...	2	6	4 2		2	8	4 2	Manna, flaky ....	2	0	.2 6		2	6	0 0		2	6	0 0		2	6	0 0
silver... ..	1	4	3 4		1	4	3 3	small .....	1	6	1 9		1	6	1 9		1	6	1 9		1	6	1 9
Mexican, black...	2	7	3 0		2	5	2 9	Musk.....per oz.	18	0	.23 0		20	0	.23 0		20	0	.23 0		20	0	.23 0
silver... ..	2	6	2 7		2	3	2 4	Nux Vomica.....	8	0	10 0		8	0	9 0		8	0	9 0		8	0	9 0
Lima .....	2	7	3 2		2	6	3 0	Opium, Turkey ..	16	0	.19 6		14	0	.15 6		14	0	.15 6		14	0	.15 6
Teneriffe, black ..	2	7	3 2		2	6	3 0	Egyptian.....	7	0	.12 0		6	0	.11 0		6	0	.11 0		6	0	.11 0
silver... ..	2	6	2 8		2	3	2 7	Orris Root, pr cwt.	26	0	.23 0		27	0	.29 0		27	0	.29 0		27	0	.29 0
DRUGS.								Pink Root, per lb..	3	0	3 3		1	9	2 2		1	9	2 2		1	9	2 2
Aloes, Hepatic, ct.	130	0	200 0		130	0	160 0	Quassia (bit. wd) ton	90	0	100 0		70	0	.80 0		70	0	.80 0		70	0	.80 0
Socotrine .....	180	0	480 0		150	0	480 0	Rhatania Root, lb.	0	9	1 3		0	9	1 0		0	9	1 0		0	9	1 0
Cape, good .....	45	0	.51 0		38	0	.42 0	Rhbrb. China, rnd.	1	9	4 6		0	9	3 0		0	9	3 0		0	9	3 0
inferior.....	26	0	.40 0		23	0	.36 0	flat .....	2	0	4 9		1	3	3 2		1	3	3 2		1	3	3 2
Barbadoes.....	60	0	380 0		60	0	420 0	Dutch, trmd..	5	0	6 0		3	0	3 6		3	0	3 6		3	0	3 6
Ambergris, gray.								Russian .....	12	6	.13 0		11	6	0 0		11	6	0 0		11	6	0 0
per oz.....	22	0	.25 0		35	0	.38 0	Saffron, Spanish ..	32	0	.34 0		46	0	.47 0		46	0	.47 0		46	0	.47 0
Angelica Root, ct..	20	0	.35 0		20	0	.35 0	Salep ...per cwt.	140	0	170 0		170	0	190 0		170	0	190 0		170	0	190 0
Aniseed, Chinastr.	100	0	110 0		70	0	.80 0	Sarsaparilla, Lima	0	10	1 5		0	10	1 3		0	10	1 3		0	10	1 3
German, &c.....	19	0	.38 0		22	0	.42 0	Para .....	0	9	1 2		0	10	1 2		0	10	1 2		0	10	1 2
Ealsam Canada, lb	1	3	0 0		1	3	0 0	Honduras.....	0	8	1 4		0	11	1 4		0	11	1 4		0	11	1 4
Capivi.....	1	5	1 64		1	8	1 9	Jamaica.....	1	2	2 3		1	3	2 4		1	3	2 4		1	3	2 4
Peru.....	4	10	0 0		4	7	4 8	Sassafras...per cwt.	11	0	.12 0		12	0	.13 0		12	0	.13 0		12	0	.13 0
Tolu .....	3	10	4 0		3	4	0 0	Scammony, per lb.															
Bark Cascarilla ct.	23	0	.40 0		24	0	.49 0	virgin....	27	0	.34 0		28	0	.36 0		28	0	.36 0		28	0	.36 0
Peru crow & gray								second .....	14	0	.24 0		14	0	.24 0		14	0	.24 0		14	0	.24 0
per lb.....	1	0	2 4		1	2	2 6	Seneca Root.....	4	4	4 9		2	2	2 3		2	2	2 3		2	2	2 3
Calisaya, flat....	3	3	3 6		3	6	3 8	Senna, Calcutta ..	0	14	0 24		0	14	0 24		0	14	0 24		0	14	0 24
quill.....	3	0	3 3		3	2	3 4	Bombay ...	0	24	0 44		0	2	0 3								

## PRICE CURRENT—continued.

DRUGS.	1863.		1862.		OILS.	1863.		1862.	
	s. d.	s. d.	s. d.	s. d.		s. d.	s. d.	s. d.	s. d.
Vanilla, Mexican lb.	25	0 .55	0	20 0 .50	Clove .....	0	1 .0 4	0	4 0 0
Wormseed, per cwt.	2	0 .0 0	0	2 0 .0 0	Croton .....	0	0 .0 0	0	3 0 4
GUM. .... per cwt.					Juniper ... per lb.	1	10 .3 0	1	10 .4 0
Ammoniac, drop.	100	0 120	0	80 0 125	Lavender .....	2	6 .4 6	2	6 .5 0
lump .....	15	0 .65	0	15 0 .60	Lemon .....	4	0 .9 6	5	0 .10 6
Animi, fine pale ..	200	0 250	0	290 0 320	Lemongrass, pr oz	0	0 .7 0	0	5 0 6
bold amber.	200	0 220	0	260 0 270	Mace, ex .....	0	1 .0 2	0	1 .0 2
medium .....	170	0 180	0	160 0 180	Neroli .....	5	0 .7 0	6	0 .9 0
small & dark	100	0 125	0	100 0 160	Nutmeg .....	0	1 .0 2	0	1 .0 14
ordinary dark	40	0 .80	0	40 0 .90	Orange ... per lb.	5	0 .6 6	6	6 .7 0
Arab. E. l. f. pale pkd	52	0 .59	0	52 0 .57	Otto Roses, per oz.	14	0 .23	0	16 0 .26
unsortd, good to f	34	0 .48	0	36 0 .48	Peppermint, pr lb.				
red and mixed	20	0 .30	0	28 0 .34	American .....	8	6 .12	9	7 .6 14
siftings .....	15	0 .30	0	18 0 .23	English .....	33	0 .34	33	0 .38
Turkey, pkd. gdto f.	115	0 180	0	110 0 155	Rhodium . per oz.	3	6 .5 6	3	9 .6 0
second & infr.	40	0 110	0	42 0 105	Rosemary . per lb.	1	8 .3 0	1	10 .3 0
in sorts .....	32	0 .50	0	30 0 .43	Sassafras .....	3	0 .3 6	3	6 .4 6
Gedda .....	26	0 .27	0	26 0 .23	Spearminut. ....	5	0 .9 0	5	0 .12 6
Barbary, white ..	36	0 .50	0	34 0 .38	Spike .....	1	3 .1 6	1	3 .1 6
brown .....	27	0 .28	0	26 0 .29	Thyme .....	1	9 .2 3	1	9 .2 6
Australian .....	23	0 .30	0	16 0 .13	PITCH, Brtsh, prwt.	12	0 0 0	7	0 0 0
Assafet. fr. to gd.	32	0 115	0	16 0 100	Swedish .....	0	0 0 0	10	6 .0 0
Benjamin, 1st qual	350	0 650	0	360 0 660	SALT PETRE, pr cwt.				
2nd qual .....	280	0 500	0	160 0 330	Engl, 6p c or under	36	6 .87	6	39 6 .40
3rd .....	50	0 200	0	60 0 150	over 6 per cent.	35	0 .36	6	37 0 .39
Copal, Angola red.	95	0 100	0	100 0 125	Madras .....	34	0 .36	0	37 0 .38
pale .....	95	0 100	0	95 0 105	Bombay .....	40	0 .34	0	36 0 .37
Benguela .....	85	0 160	0	105 0 140	British-refined ..	40	0 .46	0	42 0 .43
Sierra Lael b.	0	6 .1 6	0	7 .1 9	Nitrate of Soda ..	13	6 .14	0	16 6 .14
Manilla pret ..	20	0 .42	0	17 0 .40	SEED, Canary, pr gr	0	0 .50	0	40 0 .50
Dammar ple. pr ct	37	6 .48	0	40 0 .52	Caraway, Eng, p. c.	0	0 0 0	0	23 0 .25
Galbanum .....	100	0 120	0	140 0 160	German, & c .....	28	0 .31	0	0 0 0
Gnbgc, pkd. pipe	140	0 210	0	140 0 180	Coriander .....	10	0 .12	0	15 0 .17
in sorts .....	80	0 120	0	80 0 110	East India .....	0	0 0 0	0	0 0 0
Guaiacum .pr. lb.	0	6 .1 6	0	7 .1 6	Hemp .....	40	0 .44	0	46 0 .50
Kino .....	160	0 200	0	160 0 210	Linsced, Black Sea	63	6 .65	0	57 0 0 0
Kowrie .....	34	0 .39	0	24 0 .26	Calcutta .....	65	0 .68	0	57 0 .59
Mstic, pkd. pr lb.	5	0 .5 3	6	0 .6 6	Bombay .....	70	0 .71	0	63 0 0 0
Myrrh gd & fi pr ct	160	0 200	0	160 0 180	Egyptian .....	62	0 .63	0	56 0 .56 6
sorts .....	70	0 150	0	70 0 130	Mustard, brn, p. bhl	7	0 .12	0	8 0 .12
Oliganum, pl drop	65	0 .67	6	56 0 .67	white .....	7	0 .8 6	6	0 .9 0
ambr & yel.	45	0 .64	0	44 0 .55	Poppy, E.I. per gr.	63	0 .64	0	59 0 0 0
mixd. & dk.	10	0 .30	0	12 0 .35	Rape, English .....	0	0 0 0	0	0 0 0
Senegal .....	40	0 .46	0	38 0 .44	Danube .....	0	0 0 0	0	0 .70
Sandrac .....	85	0 105	0	75 0 105	Calcutta, fine ..	69	0 .71	0	64 0 0 0
Tragacanth, leaf.	180	0 320	0	130 0 330	Bombay .....	70	0 .80	0	68 0 .70
in sorts .....	100	0 130	0	100 0 130	Teel, Sesame or Gingy	68	0 .73	0	62 0 .66
OILS. .... per tun.	2	2 .2 2	2	2 .2 2	Cotton ... per tun	130	0 0 0	0	150 0 160
Scal .....	42	0 .47	10	35 0 .41	Gnd. Nut-Krnels, tn	300	0 350	0	340 0 350
Sperm, body .....	85	0 .87	10	94 0 .95	SOAP, Lind yel. pr ct	21	0 .36	0	21 0 .36
Cod .....	46	0 .47	0	40 0 0 0	mottled .....	36	0 .38	0	34 0 .36
Whale, Greenland.	0	0 0 0	0	0 0 0 0	curd .....	50	0 0 0	0	50 0 0 0
Eth Sea pale	43	0 .44	0	35 10 .36	Castile .....	38	0 .41	0	37 0 .40
E. I. Fish .....	38	10 .39	0	50 10 .32 10	Marseilles .....	40	0 .42	0	40 0 .41 6
Olive, Galipoli, ton.	60	0 0 0	0	56 0 .57	SOY, China, per gal.	2	6 .2 8	2	1 .2 4
Florence, q-chst.	1	0 .1 2	0	20 0 .22	Japan .....	0	16 .1 0	0	8 0 .10
Cocant. Cocohn, tn	56	0 .56	6	49 6 .50	SPONGE, Turk f, pkd	20	0 .24	0	20 0 .24
Ceylon .....	51	6 .52	0	43 6 .49	fair to good .....	8	0 .18	0	8 0 .18
Sydney .....	43	0 .55	0	43 0 .47	ordinary .....	3	0 .6 0	0	3 0 0 0
Ground Nut & Gin.					Bahama .....	0	4 .1 3	0	3 .1 0
Bombay .....	47	10 .0 0	0	43 10 .44 10	TURPENTINE,				
Madras .....	50	0 0 0	0	44 10 .45	Rough . per cwt.	0	0 0 0	0	25 0 0 0
Palm, fine .....	39	10 .41	0	42 10 .0 0	Spirits, French ..	0	0 .95	0	0 0 0 0
Linsced .....	44	15 .0 0	0	34 0 .34 5	American, insols	110	0 0 0	0	68 0 0 0
Raped, Engl. pale	54	10 .0 0	0	46 0 0 0	WAX, Bees, English	172	0 175	0	170 0 175
brown .....	53	0 0 0	0	45 0 0 0	German .....	162	0 180	0	160 0 165
Foreign do .....	50	10 .57	0	47 0 0 0	American .....	165	0 175	0	180 0 200
brown .....	53	10 .54	0	45 0 0 0	white fine .....	0	0 0 0	0	200 2 215
Lard .....	47	0 0 0	0	54 0 0 0	Jamaica .....	165	0 175	0	180 0 190
Tallow .....	39	0 .40	0	37 0 0 0	Gambia .....	170	0 177	0	180 0 0 0
Rock Crude .....	12	0 .19	0	0 0 0 0	Mogadore .....	120	0 160	0	120 0 150
OILS, Essential—	s. d.	s. d.	s. d.	s. d.	East India .....	140	0 170	0	140 0 170
Almond essen. lb.	19	0 0 0	0	19 0 0 0	ditto, bleached ..	170	0 220	0	160 0 200
expressed .....	0	0 0 0	0	1 0 0 0	vegetable, Japan ..	66	0 .85	0	55 0 .75
Anised .....	5	6 .5 8	6	0 6 .2	WOOD, Dye, per ton.				
Bay .....	110	0 120	0	0 0 0 0	Fustic, Cuba .....	140	0 155	0	160 0 170
Bergamott pr lb.	5	6 .12	0	6 6 .14	Jamaica .....	120	0 0 0	0	115 0 110
Cajeputa, bond, oz.	0	24 .0 3	0	1 0 1 0 14	Savauilla .....	100	0 105	0	105 0 120
Caraway ... pr lb.	4	3 .6 0	0	4 3 .6 0	Zante .....	105	0 0 0	0	140 0 180
Cassia .....	8	3 .8 6	8	9 .2 0	Logwood, Camphy	180	0 190	0	180 0 0 0
Cinamon (n b), oz.	1	6 .4 0	0	1 3 .4 0	Honduras .....	140	0 155	0	180 0 0 0
Cinamon Leaf ..	0	3 .0 44	0	2 .0 4	St. Domingo .....	105	0 110	0	180 0 135
Citronel .....	0	62 .0 64	0	4 .0 5	Jamaica .....	102	6 105	0	120 0 125

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1438. A. WORMULL. *Improvements in trepanning instruments.* Dated May 13th, 1862.

The chief improvement consists in constructing these instruments so that the cutting tool may have the required rotary motion communicated to it by means of some convenient mechanical arrangement of gearing, instead of this motion being given by the twist of the operator as heretofore. The invention is not described apart from the drawings. *Patent completed.*

1528. W. PETRIE. *Improvements in vessels for boiling chemical products, as sulphuric acid, and in apparatus for indicating the degree of concentration and temperature of such products in the boiler, which apparatus is applicable to other pyrometric purposes.* Dated May 20, 1862.

The patentee claims, 1, The means of outflow for the boiling liquor, namely, an open shaped vessel fixed within the boiler, and having its rim at a level suitable to receive the foam as it rises from the liquor, so that the foam shall settle therein and pour out in a liquid state by a syphon, or through a tube attached to the vessel, so as to trap the vapour within the boiler while the liquid flows out through the tube, as described. 2, The general construction of the vessel for boiling chemical products, arising from the peculiar combination of parts, themselves formed and combined, as described. 3, Deadening, frosting, or roughing the heated surface of such vessels externally, as described. 4, The particular construction of the pyrometric apparatus, all as described and represented in the drawings. *Patent completed.*

1674. S. WESTON. *Improvements in trusses.* Dated June 3, 1862.

In carrying out this invention the pad is mounted on and carried by a metal disc or plate, which has two studs or projections

thereon, which enter through holes in the back of the pad. On either side of these studs or projections is a half elliptical spring, which is fixed to the disc or plate so that the ends of the springs rest against and press the pad outwards, yet allow of its moving on the projections or studs in any direction. On the disc or plate is attached one end of a bent wire or rod, by means of a pin joint, so that it is capable of movement. This bent wire or rod ascends up nearly to the hip. At the other end of this wire or rod there is a hook or other means of attaching it to a strap, which passes over the hip and behind the back of the person who is wearing the truss. The other end of this strap is then passed over the other hip, and is attached to the end of another wire or rod, which is, by its other end, fixed to the disc or plate, and ascends some distance from the disc up towards the hip last mentioned. One end of a second strap is attached to the end of another wire or rod, which is also attached to the disc or plate, and descends some distance below it. This strap passes between the legs of the person wearing the truss, and then ascends up behind the person in an inclined direction, and is made fast to the other strap, near where it passes over the hip last mentioned. *Patent completed.*

1754. W. JACKSON. *An improved shield for the gums, to protect them from injury when cleaning the teeth.* Dated June 12, 1862.

This consists in the use of a thin metallic plate, which is made to fix over the gums close up to the necks of the teeth, leaving the whole enamelled surface of the teeth exposed. A separate plate is fixed to the upper and lower jaws, and the plates are kept in place when in use by spring attachment or otherwise. *Patent completed.*

ERRATA.—In the abridged Specification, No. 1090, given in our January number, there are several typographical errors, which we request our readers to correct. For *lignin*, write *lignin*; for *oxogen*, *oxygen*; and for 3 N 0.4 write 3 NO 4.—ED. C. and D.

1382. G. C. GRIMES. *Improvements in the manufacture of cigar lights, splints, matches, and tapers or vestas, and in machinery or apparatus employed therein.* Dated May 8, 1862.

This invention relates, 1, To the manufacture of cigar lights, adapted particularly for sticking into the ends of cigars before ignition. The patentee mixes and grinds a pastile composition, which may be such as is ordinarily used in the manufacture of cigar lights, but to which he adds fine charcoal in powder, or cascarilla or other powder, so as to form a mass sufficiently plastic to admit of being rolled into a thin cake; the quantity of powder required being readily ascertained by adding it in small quantities till the desired consistency is obtained. The improvements relate, 2, To cigar lights formed on splints, and consist in saturating or coating the splint upon which the pastile composition is applied with a solution or coating of ignitable matter or composition, such as chlorate or nitrate of potash. The improvements relate, 3, To dipping the ends of splints upon which pastile composition is to be applied, in a resinous or waxy matter or composition that will not readily melt at ordinary temperatures, but which, when pastile composition applied thereon is ignited, will, by the heat thereof, admit of the splint slipping out, and leaving the ignited matter in or on the cigar. Common wax answers the purpose very well, but it is made harder and more suitable by the addition of a little resin or such like substance, and the patentee mixes a little of some agreeable scent with it to neutralize or qualify the smell from the wax or resin employed. He then dips these prepared ends of the splints in the pastile composition, and finishes them in the usual way. The improvements relate, 4, To the manufacture of cigar lights, by substituting for wood or metal splints cotton or other suitable fibrous material, coated with wax, stearine, or other composition, as in the manufacture of tapers or vestas, by combining with the wax or stearine, or other coating applied to the fibre, charcoal and scent with ignitable substance, as chlorate or nitrate of potash, amorphous, phosphorus, separately or combined, so as to make a light to burn with a flame or only to smoulder. The improvements relate, 5, To means of forming wax stearine or other composition tapers or vestas. The improvements relate, 6, To means for cutting splints. The improve-

ments relate, 7, To means or apparatus such as for which letters patent were granted to the present patentee and George Bell, on the 21st December, 1854 (No. 2691). *Patent completed.*

1857. E. C. NICHOLSON. *Improvements in the preparation of colouring matters applicable to dyeing and printing.* Dated June 24, 1862.

For the purpose of preparing a blue coal-tar dye soluble in water, either alone or mixed with acid or alkali, the patentee employs the following process:—He takes by preference the substance known as "Blue de Lyons," or that known as "Azuline," these being blue colouring matters obtained from aniline and similar bases. He extracts all soluble matter from it by boiling it with water containing sulphuric acid. He employs for this purpose the said acid in the proportion of about 4 oz. by weight to every gallon of water. When all or nearly all the soluble matter is extracted, he collects the insoluble matter and dries it thoroughly and completely. He then takes this substance reduced to powder, and adds to it about four times its weight of sulphuric acid, say, Sp. Gr. 1.845 (*i.e.*, concentrated sulphuric acid of commerce), and he raises the temperature of the mixture to about 300 degrees Fahrenheit, and keeps it stirred until all is dissolved; and he then maintains it at about this temperature until a sample when added to water is entirely dissolved. If the temperature is raised too high, sulphurous acid is evolved, and the dye gradually destroyed. The acid solution can be diluted and used for dyeing or printing in the ordinary way; or, if too acid, the excess of sulphuric acid may be removed by lime or other suitable alkali; or if an excess of lime be added, the sulphuric acid is entirely precipitated in the form of sulphate of lime, and a colourless solution is obtained which, when neutralized with any vegetable or other acid, develops the improved soluble blue dye; or he finds that the excess of acid may be separated from the acid solution by adding to it, say, four times its bulk of water, and then filtering—For the colour, although soluble in concentrated acid and also in water, is practically insoluble in water containing a large quantity of acid; or the slight loss of colouring matter which would arise from the use of water in this manner may be avoided by the use of brine in place thereof. *Patent completed.*

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